USDA United States Department of Agriculture

Natural Resources Conservation Service

Montana Water Supply Outlook Report January 1, 2004

Picture: Black Bear SNOTEL Site - Winter of 1997

Water Supply Outlook Report
and
Federal - State - Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:
See Attached List

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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United States Department of Agriculture
Natural Resources Conservation Service
Bozeman, Montana

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10 E Babcock
Federal Bldg Room 443
Bozeman MT 59715

Where to Get More Information

This contact list provides you with the names and phone numbers of individuals who can provide more detailed snow survey information for each county.

Beaverhead County
Victor Hager
683-3800

Big Horn County
Evan Van Order
665-3442

Blaine County
Matthew Crampton
357-2320

Broadwater County
Kelly Morris
266-3146

Carbon County
Gregory Evertz
962-3641

Carter County
Wayne Yost
775-6355

Cascade County
Marty Metz
727-7580

Chouteau County
Dan Van Voast
622-5627

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Terry Heck
232-7905

Daniels County
Stanley French
487-5366

Dawson County
Linda Peterson-Lohse
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Fallon County
Ann Fischer
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Fergus County
Patty Creamer
538-7401

Flathead County
Angel Rosario
752-4242

Gallatin County
Gordon Hill
522-4000

Garfield County
Sue Fitzgerald
557-2232

Glacier County
Mark Johnson
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Golden Valley County
John Rouane Jr.
323-2103

Granite County
Mary McDonald Pochelon
859-3291

Hill County
Deana Grabofsky
265-6792

Jefferson County
Julie Sacks
287-3215

Judith Basin County
Rick Caquelin
566-2311

Lake County
David Wolf
676-2841

Lewis and Clark County
Mindy Gauthier
449-5000

Liberty County
Dawn Wickum
759-5778

Lincoln County
Kirk Sullivan
296-2233

Madison County
Ole Berkram
842-5741

McCone County
Regan Fanning
485-2744

Meagher County
Tammy DeCock
547-3633

(over)

Mineral County
Tony Prince
829-3395

Missoula County
Tony Prince
829-3395

Musselshell County
John Rouane Jr.
323-2103

Park County
Ron Hoagland
222-2899

Petroleum County
Nikki Lott
429-6646

Phillips County
Lorna Philp
654-1334

Pondera County
Lanny Walker
278-3922

Powder River County
Carol Hilliard
436-2417

Powell County
Glen Green
846-1703

Prairie County
Bob Prongua
635-5381

Ravalli County
Lane Johnson
363-5010

Richland County
Jamie Selting
433-2103

Roosevelt County
Robert Bray
787-5232

Rosebud County
Rocky Schwagler
346-7333

Sanders County
Don Feist
826-3701

Sheridan County
Monica Friedrich
765-1801

Silver Bow County
Julie Sacks
287-3215

Stillwater County
Philip Sandoval
322-5359

Sweet Grass County
Chuck Roloff
932-5160

Teton County
Stacy Denny-Eneboe
466-5722

Toole County
Misty Vermulm
434-5234

Treasure County
Stewart Greer
342-5510

Valley County
Denise Wiedenheft
228-4321

Wheatland County
John Oiestad
632-5534

Wibaux County
Katrina Johnson
796-2211

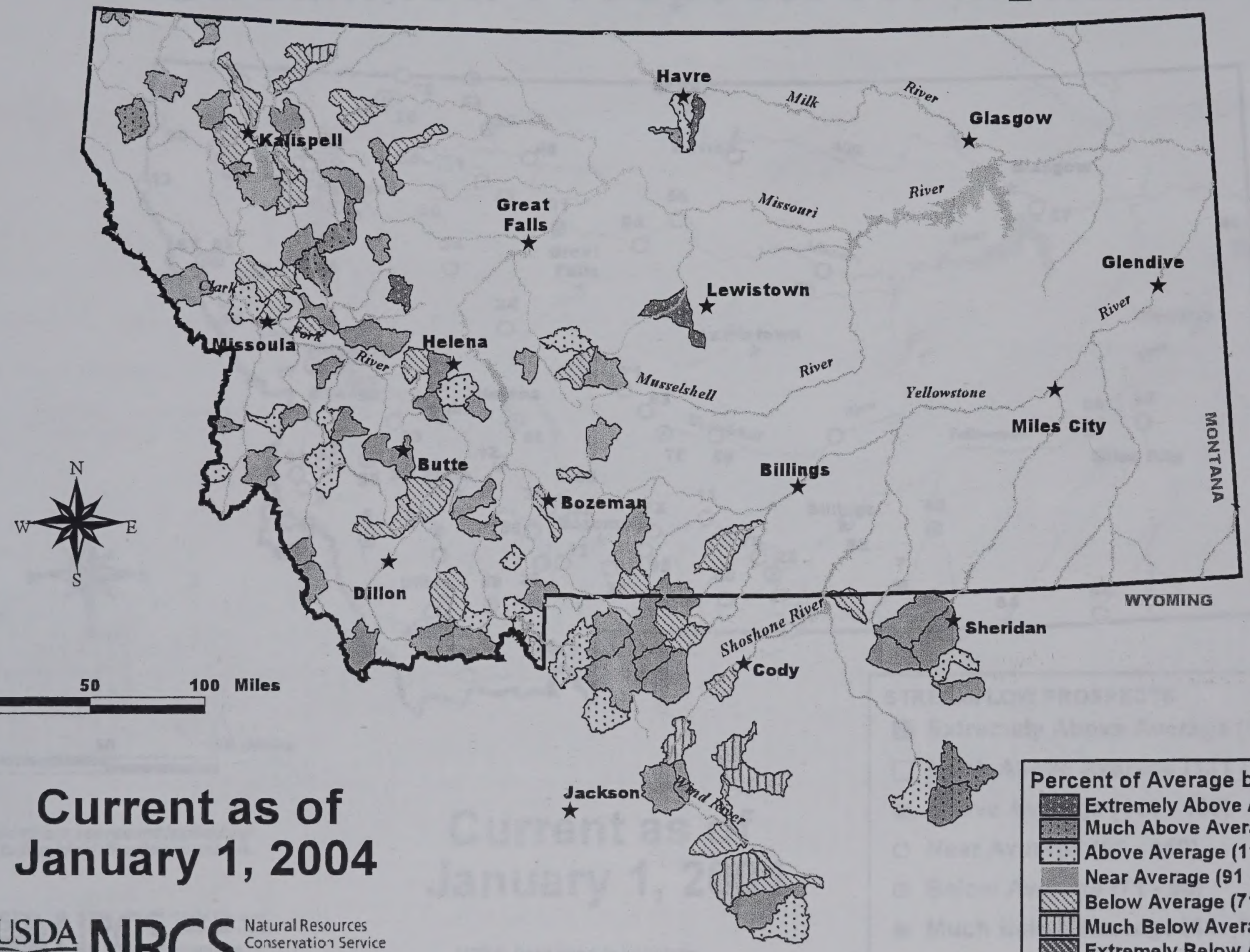
Yellowstone County
Valerie Roberson
657-6135

12/19/02

UNITED STATES DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

Mountain Snow Water Equivalent



Current as of January 1, 2004

Percent of Average by Sub-Basin

- Extremely Above Average (Over 150)
- Much Above Average (131 - 150)
- Above Average (111 - 130)
- Near Average (91 - 110)
- Below Average (71 - 90)
- Much Below Average (51 - 70)
- Extremely Below Average (Below 51)

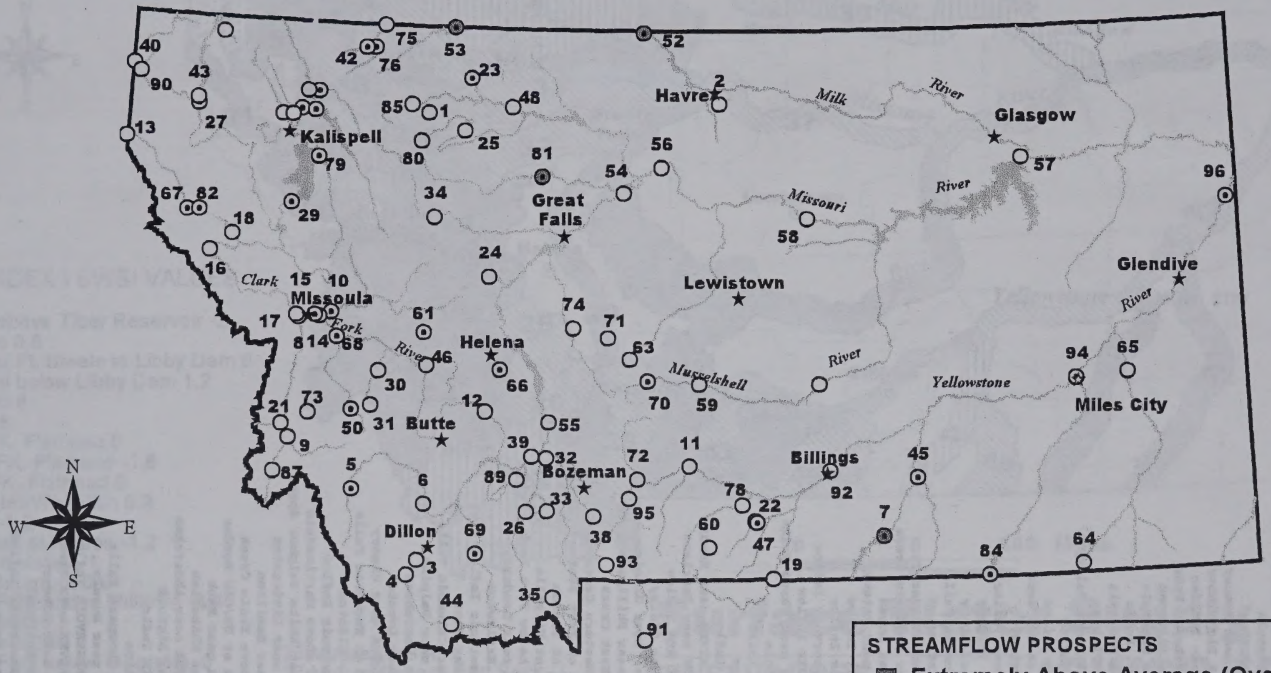
USDA NRCS Natural Resources Conservation Service Montana

http://www.mt.nrcs.usda.gov

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

Mountain Snow Water Equivalent

Streamflow Prospects for Montana



Numbers represent individual station identification numbers.

STREAMFLOW PROSPECTS

- Extremely Above Average (Over150)
- Much Above Average (131 - 150)
- Above Average (111 - 130)
- Near Average (91 - 110)
- Below Average (71 - 90)
- Much Below Average (51 - 70)
- Extremely Below Average (Below 51)

Current as of January 1, 2004

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

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Map #	Forecast Point
1	BADGER CREEK near Browning
2	BEAVER CREEK near Havre
3	BEAVERHEAD RIVER at Barretts
4	CLARK CANYON RES Inflow
5	BIG HOLE RIVER at Wisdom
6	BIG HOLE RIVER near Melrose
7	BIGHORN RIVER near St. Xavier
8	BITTERROOT at Missoula
9	BITTERROOT near Darby
10	BLACKFOOT RIVER near Bonner
11	BOULDER RIVER at Big Timber
12	BOULDER RIVER near Boulder
13	CLARK FK at Whitehorse Rpds
14	CLARK FORK above Milltown
15	CLARK FORK above Missoula
16	CLARK FORK at St. Regis
17	CLARK FORK below Missoula
18	CLARK FORK near Plains
19	CLARKS FORK RIVER near Belfry
21	COMO RESERVOIR Inflow
22	COONEY RESERVOIR Inflow
23	CUT BANK CREEK at Cut Bank
24	DEARBORN near Craig
25	DUPUYER CREEK near Valier
26	ENNIS Reservoir Inflow
27	FISHER RIVER near Libby
28	FLATHEAD at Columbia Falls
29	FLATHEAD Lake Inflow
30	FLINT CREEK below Boulder Ck
31	FLINT CREEK near Southern Cross
32	GALLATIN RIVER at Logan
33	GALLATIN RIVER near Gateway
34	GIBSON Reservoir Inflow
35	HEBGEN Reservoir Inflow
36	HUNGRY HORSE Reservoir Inflow
38	HYALITE RESERVOIR Inflow
39	JEFFERSON RIVER near Three Forks
40	KOOTENAI at Leonia
42	LAKE SHERBURNE Inflow
43	LIBBY RES Inflow
44	LIMA RESERVOIR Inflow
45	LITTLE BIGHORN RIVER near Hardin
46	LITTLE BLACKFOOT near Garrison
47	LOWER WILLOW CK RES Inflow
48	MARIAS RIVER near Shelby
49	MF FLATHEAD near West Glacier
50	MF ROCK CREEK near Philipsburg
52	MILK RIVER at East Cross.
53	MILK RIVER at Western Crossing
54	MISSOURI RIVER at Fort Benton
55	MISSOURI RIVER at Toston
56	MISSOURI RIVER at Virgelle
57	MISSOURI RIVER below Fort Peck
58	MISSOURI RIVER near Landusky
59	MUSSELSHELL at Harlowton
60	MYSTIC LAKE Reservoir Inflow
61	NEVADA CREEK near Finn
62	NF FLATHEAD near Columbia Falls
63	NF MUSSELSHELL near Delpine
64	POWDER RIVER at Moorehead
65	POWDER RIVER near Locate
66	PRICKLY PEAR CREEK near Clancy
67	PROSPECT CREEK at Thompson Falls
68	ROCK CREEK near Clinton
69	RUBY RIVER Reservoir Inflow
70	SF MUSSELSHELL above Martinsdale
71	SHEEP CREEK near White Sulphur Spgs.
72	SHIELDS RIVER near Livingston
73	SKALKAHO CK near Hamilton
74	SMITH RIVER above Eagle Creek
75	ST. MARY RIVER at US/CAN Border
76	ST. MARY RIVER near Babb
77	STILLWATER near Whitefish
78	STILLWATER RIVER near Absarokee
79	SWAN RIVER near Bigfork
80	SWIFT RESERVOIR Inflow
81	TETON near Dutton
82	THOMPSON near Thompson Falls
83	TOBACCO RIVER near Eureka
84	TONGUE RIVER RESERVOIR Inflow
85	TWO MEDICINE RIVER near Browning
87	WF BITTERROOT near Conner
88	WHITEFISH near Kalispell
89	WILLOW CREEK Reservoir Inflow
90	YAAK RIVER near Troy
91	YELLOWSTONE at Lake Outlet
92	YELLOWSTONE RIVER at Billings
93	YELLOWSTONE RIVER at Corwin Spgs
94	YELLOWSTONE RIVER at Miles City
95	YELLOWSTONE RIVER near Livingston
96	YELLOWSTONE RIVER near Sidney

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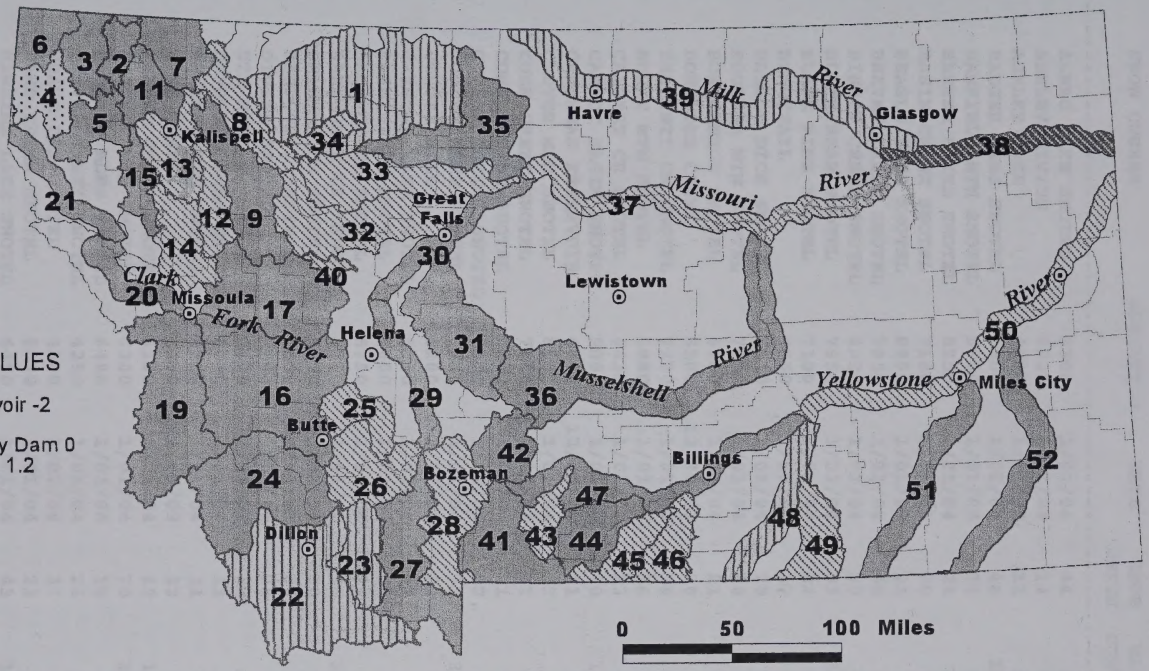

RIVER INDEX \ SWSI VALUES

1 Marias above Tiber Reservoir -2
2 Tobacco 0.6
3 Kootenai Ft. Steele to Libby Dam 0
4 Kootenai below Libby Dam 1.2
5 Fisher -0.8
6 Yaak 0.5
7 North FK. Flathead 0
8 Middle FK. Flathead -1.6
9 South FK. Flathead 0
11 Stillwater/Whitefish 0.2
12 Swan -1.2
13 Flathead at Polson -1.2
14 Mission Valley -1
15 Little Bitterroot 0.9
16 Clark Fork above Milltown -0.4
17 Blackfoot -0.3
19 Bitterroot 0.9
20 Clark Fork below Bitterroot 0
21 Clark Fork below Flathead -0.8
22 Beaverhead -2.7
23 Ruby -2.2
24 Big Hole -0.5
25 Boulder (Jefferson) -1
26 Jefferson -1.6
27 Madison 0.2
28 Gallatin -1.3
29 Missouri above Canyon Ferry -0.6
30 Missouri below Canyon Ferry -0.8
31 Smith -0.2
32 Sun -1.3
33 Teton -1
34 Birch/Dupuyer Creeks -1.7
35 Marias -0.3
36 Musselshell -0.7
37 Missouri above Fort Peck -1
38 Missouri below Fort Peck -3.9
39 Milk -2.9
40 Dearborn near Craig -1.4
41 Yellowstone above Livingston 0.1
42 Shields -0.6
43 Boulder (Yellowstone) -1.6
44 Stillwater -0.2
45 Rock/Red Lodge Creeks -1.4
46 Clarks Fork -1.7
47 Yellowstone above Bighorn -0.4
48 Bighorn below Bighorn Lake -2.4
49 Little Bighorn -1.1
50 Yellowstone below Bighorn -1.3
51 Tongue -0.9
52 Powder -0.5

Surface Water Supply Index (SWSI) Values

Current as of January 1, 2004

SWSI VALUES

- Extremely Dry -4.0 to -3.0
- Moderately Dry -2.9 to -2.0
- Slightly Dry -1.9 to -1.0
- Near Average -0.9 to 0.9
- Slightly Wet 1.0 to 1.9
- Moderately Wet 2.0 to 2.9
- Extremely Wet 3.0 to 4.0
- SWSI Not Applicable

NOTE: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.

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SNOTEL AND SNOW COURSE SUMMARY
JANUARY 2004

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
ALBRO LAKE SNOTEL	8300	1/01/04	44	8.7	4.9	9.6
ASHLEY DIVIDE	4820	1/01/04	14	2.6	1.0	3.4
ASHLEY LAKE	4000	1/01/04	11	2.3	.7	2.6
BADGER PASS SNOTEL	6900	1/01/04	46	13.8	7.0	15.2
BANFIELD MTN SNOTEL	5600	1/01/04	34	8.2	7.1	9.0
BARKER LAKES SNOTEL	8250	1/01/04	24	5.8	4.3	6.7
BASIN CREEK SNOTEL	7180	1/01/04	20	3.7	2.4	3.7
BEAGLE SPGS SNOTEL	8850	1/01/04	21	3.7	2.7	3.7
BEAVER CREEK SNOTEL	7850	1/01/04	46	8.5	4.6	7.9
BISSON CREEK SNOTEL	4920	1/01/04	20	4.5	1.6	4.5
BLACK BEAR SNOTEL	7950	1/01/04	93	22.8	14.0	17.2
BLACK PINE SNOTEL	7100	1/01/04	22	5.0	3.3	5.2
BLACKTAIL	5650	1/06/04	32	6.8	4.3	6.8
BLOODY DICK SNOTEL	7550	1/01/04	28	6.0	3.8	5.6
BOULDER MTN SNOTEL	7950	1/01/04	48	9.4	7.6	9.1
BOX CANYON SNOTEL	6700	1/01/04	21	4.3	2.5	4.5
BOXELDER CREEK	5100	12/30/03	30	5.8	.3	3.4
BRACKETT CR SNOTEL	7320	1/01/04	38	7.6	5.7	8.9
BURNT MTN SNOTEL	5880	1/01/04	16	3.3	1.6	--
CALVERT CR SNOTEL	6430	1/01/04	23	4.6	3.1	3.9
CARROT BASIN SNOTEL	9000	1/01/04	70	13.9	7.5	13.1
CHESSMAN RESERVOIR	6200	12/29/03	11	1.5	.4	1.5
CLOVER MDW SNOTEL	8800	1/01/04	33	6.9	5.3	8.1
COLE CREEK SNOTEL	7850	1/01/04	31	6.5	6.2	7.5
COMBINATION SNOTEL	5600	1/01/04	11	2.7	2.3	2.2
COPPER BOTTOM SNOTEL	5200	1/01/04	22	5.3	2.9	5.3
COPPER CAMP SNOTEL	6950	1/01/04	71	24.9	8.4	13.7
COYOTE HILL	4200	12/31/03	23	5.7	1.0	4.3
CRYSTAL LAKE SNOTEL	6050	1/01/04	47	8.7	3.9	5.4
DAISY PEAK SNOTEL	7600	1/01/04	27	5.3	2.4	4.7
DALY CREEK SNOTEL	5780	1/01/04	25	6.1	3.7	4.9
DARKHORSE LK. SNOTEL	8700	1/01/04	56	11.9	7.7	13.9
DEADMAN CR SNOTEL	6450	1/01/04	30	5.2	2.9	4.6
DISCOVERY BASIN	7050	12/31/03	26	4.9	2.9	4.2
DIVIDE SNOTEL	7800	1/01/04	28	5.0	3.3	4.8
DIX HILL	6400	12/28/03	22	4.2	1.6	4.5
DUPUYER CREEK SNOTEL	5750	1/01/04	13	3.2	1.0	4.4
EMERY CREEK SNOTEL	4350	1/01/04	31	7.1	4.5	7.0
FISH CREEK	8000	12/29/03	22	3.2	2.0	4.4
FISHER CREEK SNOTEL	9100	1/01/04	69	16.7	10.9	16.3
FLATTOP MTN SNOTEL	6300	1/01/04	70	18.6	16.6	21.4
FROHNER MDWS SNOTEL	6480	1/01/04	19	4.0	2.5	3.4
GARVER CREEK SNOTEL	4250	1/01/04	21	5.4	4.4	5.2
GRAVE CRK SNOTEL	4300	1/01/04	37	8.6	5.9	7.7
HAND CREEK SNOTEL	5030	1/01/04	23	5.5	3.4	5.9
HAWKINS LAKE SNOTEL	6450	1/01/04	43	11.0	10.4	12.4
HEBGEN DAM	6550	12/31/03	32	5.9	3.3	5.1
HELL ROARING DIVIDE	5770	12/29/03	47	11.1	7.7	13.4
HOLBROOK	4530	1/05/04	28	6.2	1.6	4.2
HOODOO BASIN SNOTEL	6050	1/01/04	69	18.2	12.0	19.3
JOHNSON PARK	6450	12/29/03	18	2.6	1.1	2.8
KRAFT CREEK SNOTEL	4750	1/01/04	27	6.4	3.7	6.9
LAKEVIEW RDG. SNOTEL	7400	1/01/04	31	5.5	4.4	5.1
LEMHI RIDGE SNOTEL	8100	1/01/04	23	4.9	3.8	4.7
LICK CREEK SNOTEL	6860	1/01/04	33	5.6	2.8	5.3
LONE MOUNTAIN SNOTEL	8880	1/01/04	44	8.8	4.8	7.9
LOWER TWIN SNOTEL	7900	1/01/04	47	9.0	5.0	8.8
LUBRECHT SNOTEL	4680	1/01/04	14	3.5	1.6	2.6
LUBRECHT FOREST NO 3	5450	12/30/03	15	2.3	.6	2.7
LUBRECHT FOREST NO 4	4650	12/30/03	7	1.1	.5	1.4

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
LUBRECHT FOREST NO 6	4040	12/30/03	8	1.2	.4	1.6
LUBRECHT HYDROPLOT	4200	12/29/03	11	2.0	.6	2.5
MADISON PLT SNOTEL	7750	1/01/04	64	13.8	7.4	11.2
MANY GLACIER SNOTEL	4900	1/01/04	18	4.7	3.4	7.0
MARIAS PASS	5250	12/29/03	25	6.9	3.4	7.3
MONUMENT PK SNOTEL	8850	1/01/04	40	8.3	6.6	9.9
MOSS PEAK SNOTEL	6780	1/01/04	55	13.0	10.2	16.8
MOULTON RESERVOIR	6850	12/29/03	22	3.2	1.5	3.5
MT LOCKHART SNOTEL	6400	1/01/04	32	8.8	5.3	9.5
MULE CREEK SNOTEL	8300	1/01/04	---	6.1	4.1	6.9
N.E. ENTRANCE SNOTEL	7350	1/01/04	19	3.7	2.7	5.0
NEVADA RIDGE SNOTEL	7020	1/01/04	31	7.1	5.0	6.8
NEZ PERCE CMP SNOTEL	5650	1/01/04	33	7.4	5.0	6.1
N.F. ELK CR SNOTEL	6250	1/01/04	25	5.8	3.1	5.1
NF JOCKO SNOTEL	6330	1/01/04	60	17.4	11.1	19.4
NOISY BASIN SNOTEL	6040	1/01/04	57	13.0	10.5	19.8
OPHIR PARK	7150	12/28/03	30	5.5	2.9	6.6
PETERSON MDW SNOTEL	7200	1/01/04	25	4.9	3.1	4.4
PICKFOOT CRK SNOTEL	6650	1/01/04	---	6.2	4.3	5.2
PIKE CREEK SNOTEL	5930	1/01/04	37	10.1	6.0	12.0
PIPESTONE PASS	7200	12/29/03	10	2.0	.8	2.2
PLACER BASIN SNOTEL	8830	1/01/04	40	8.8	4.9	8.7
POORMAN CR SNOTEL	5100	1/01/04	70	19.3	10.6	13.4
PORCUPINE SNOTEL	6500	1/01/04	21	3.5	1.7	2.8
ROCKER PEAK SNOTEL	8000	1/01/04	29	5.8	3.9	6.4
ROCKY BOY SNOTEL	4700	1/01/04	19	3.4	.1	2.2
SACAJAWEA SNOTEL	6550	1/01/04	34	6.2	4.5	5.1
SADDLE MTN SNOTEL	7900	1/01/04	52	11.4	6.9	11.7
S.F. SHIELDS SNOTEL	8100	1/01/04	40	6.3	2.3	7.5
SHORT CREEK SNOTEL	7000	1/01/04	13	2.7	2.0	2.9
SHOWER FALLS SNOTEL	8100	1/01/04	39	7.9	5.6	10.1
SKALKAHO SNOTEL	7260	1/01/04	44	10.2	6.8	10.3
SLEEPING WOMAN SNTL	6150	1/01/04	27	6.2	4.5	6.9
SPOTTED BEAR MTN.	7000	1/05/04	32	7.1	3.0	6.9
SPUR PARK SNOTEL	8100	1/01/04	39	8.3	6.3	10.0
STAHL PEAK SNOTEL	6030	1/01/04	55	14.9	14.1	17.1
STORM LAKE	7780	12/31/03	28	5.6	2.9	5.5
STUART MOUNTAIN SNTL	7400	1/01/04	51	13.4	8.1	15.1
SUCKER CREEK	3960	12/30/03	19	2.0	.0	.5
TAYLOR ROAD	4080	12/30/03	24	2.6	.0	1.8
TEN MILE LOWER	6600	12/29/03	20	3.6	1.2	3.0
TEN MILE MIDDLE	6800	12/29/03	24	4.8	1.9	4.6
TEPEE CREEK SNOTEL	8000	1/01/04	41	6.9	4.3	6.0
TIZER BASIN SNOTEL	6840	1/01/04	28	4.9	2.9	4.8
TRINKUS LAKE	6100	1/05/04	69	16.7	12.5	19.4
TRUMAN CREEK	4060	12/31/03	12	2.3	1.2	2.0
TV MOUNTAIN	6800	1/05/04	36	8.9	3.0	7.8
TWELVEMILE SNOTEL	5600	1/01/04	45	11.0	5.8	7.5
TWENTY-ONE MILE	7150	12/30/03	38	7.7	3.5	7.3
TWIN LAKES SNOTEL	6400	1/01/04	76	22.1	11.8	17.5
UPPER HOLLAND LAKE	6200	1/05/04	64	16.3	9.1	15.2
WALDRON SNOTEL	5600	1/01/04	22	5.2	2.5	5.2
WARM SPRINGS SNOTEL	7800	1/01/04	42	9.7	6.4	9.4
WEASEL DIVIDE	5450	12/30/03	51	14.4	7.3	15.2
WEST YELL'ST SNOTEL	6700	1/01/04	42	7.1	3.5	5.9
WHISKEY CREEK SNOTEL	6800	1/01/04	50	10.1	5.0	7.5
WHITE MILL SNOTEL	8700	1/01/04	41	9.3	7.6	11.1
WOOD CREEK SNOTEL	5960	1/01/04	17	4.5	1.6	4.2

Montana Water Supply Outlook Report as of January 1, 2004

The snowfall season has gotten off to a much better start than last year at this time and averages 63% above last year. All mountain basins are above last year at this time. With the mountain snowpack near average in most areas, snowfall needs to continue at an average or above average pace through the snowfall season to insure surface water supplies above those of the past several drought years. On January 1, the snow water content is about 40 to 45 percent of the normal snowpack peak, which occurs during April, which means Montana still needs to gain 55 to 60 more snow water than we currently have on January 1.

Snowpack

Mountain snow water content statewide was 102 percent of average and 163 percent of last year. West of the Continental Divide, mountain snow water content was 100 percent of average and 164 percent of last year and East of the Continental Divide, was 101 percent of average and 154 percent of last year. The most improved basin from last year is the Little Bitterroot-Ashley at nearly two and one half times more last year or 248% of last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	100	164
KOOTENAI	103	139
FLATHEAD	90	156
UPPER CLARK FORK	105	187
BITTERROOT	116	168
LOWER CLARK FORK	105	182
MISSOURI	106	176
MISSOURI HEADWATERS	107	168
JEFFERSON	100	161
MADISON	114	178
GALLATIN	101	170
MISSOURI MAINSTEM	106	192
HEADWATERS MAINSTEM	104	162
SMITH-JUDITH-MUSSELSHELL	109	161
SUN-TETON-MARIAS	89	193
MILK	175	---
ST. MARY	82	117
ST. MARY & MILK	102	182
YELLOWSTONE	96	136
UPPER YELLOWSTONE	95	137
LOWER YELLOWSTONE	94	128
WIND	89	122
SHOSHONE	88	119
BIGHORN	92	131
TONGUE	98	128
POWDER	119	178

Precipitation

December mountain and valley precipitation across the state was 100 percent of average and 155 percent of last year, while the water year precipitation was 99 percent of average and 172 percent of last year.

West of the Continental Divide, December mountain and valley precipitation was 75 percent of average and 104 percent of last year and the water year precipitation was 97 percent of average and 165 percent of last year. East of the Divide, December mountain and valley precipitation was 123 percent of average and 220 percent of last year and the water year precipitation was 102 percent of average and 178 percent of last year.

RIVER BASIN	DECEMBER % OF AVERAGE	WATER YEAR % OF AVERAGE
COLUMBIA	75	97
KOOTENAI	67	107
FLATHEAD	66	90
UPPER CLARK FORK	79	97
BITTERROOT	98	109
LOWER CLARK FORK	75	97
MISSOURI	127	105
JEFFERSON	189	77
MADISON	154	110
GALLATIN	139	96
MISSOURI MAINSTEM	106	104
SMITH-JUDITH-MUSSELSHELL	153	120
SUN-TETON-MARIAS	49	94
MILK	153	142
ST. MARY	59	88
YELLOWSTONE	115	94
UPPER YELLOWSTONE	113	97
LOWER YELLOWSTONE	116	90
WIND	107	86
SHOSHONE	103	97
BIGHORN	130	93
TONGUE	116	92
POWDER	127	87

Reservoirs

Major reservoir storages statewide were 82 percent of average and 94 percent of last year. Reservoir storage west of the Continental Divide was 111 percent of average and 100 percent of last year. East of the Continental Divide, reservoir storages were 71 percent of average and 90 percent of last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	111	100
KOOTENAI	122	101
FLATHEAD	104	101
UPPER CLARK FORK	90	96
BITTERROOT	75	134
LOWER CLARK FORK	98	96
MISSOURI	71	89
JEFFERSON	29	85
MADISON	105	96
GALLATIN	134	102
MISSOURI MAINSTEM	69	89
SMITH-JUDITH-MUSSELSHELL	33	105
SUN-TETON-MARIAS	107	90
MILK	56	52
ST. MARY	58	146
YELLOWSTONE	87	119
UPPER YELLOWSTONE	93	108
LOWER YELLOWSTONE	86	120

Streamflow

Across Montana, streamflows are forecast to average between 78 and 109 percent, for the period April 1 through July 31. West of the Continental Divide, streamflows are forecast to average between 93 and 107 percent and east of the Continental Divide, streamflows are forecast to average between 77 and 94 percent. Assuming average precipitation through the spring and summer, early season surface water is expected to be below average to near average. However, due to the cumulative moisture deficit over the past several years of drought, there could be late season water shortages.

Below are the River Basin streamflow forecasts for the period April 1 through July 31. THESE FORECASTS ASSUME NEAR NORMAL MOISTURE AND RUNOFF CONDITIONS JANUARY THROUGH JULY AND DO NOT ACCOUNT FOR WELL BELOW AVERAGE (70% or less) OR ABOVE AVERAGE (110% or more) SNOWMELT OR SPRING RAIN.

RIVER BASIN	April-July THIS YEAR % OF AVERAGE	April-July LAST YEAR % OF AVERAGE
COLUMBIA	93 to 107	51 to 65
KOOTENAI	93 to 106	62 to 74
FLATHEAD	92 to 102	57 to 65
UPPER CLARK FORK	93 to 110	42 to 60
BITTERROOT	100 to 114	52 to 66
LOWER CLARK FORK	90 to 105	47 to 62
MISSOURI	72 to 90	46 to 61
JEFFERSON	77 to 98	43 to 60
MADISON	95 to 104	65 to 74
GALLATIN	86 to 98	53 to 66
MISSOURI MAINSTEM	74 to 87	50 to 68
SMITH-JUDITH-MUSSELSHELL	76 to 97	42 to 54
SUN-TETON-MARIAS	71 to 93	39 to 56
MILK	48 to 65	46 to 60
ST. MARY	82 to 90	68 to 75
YELLOWSTONE	79 to 92	55 to 67
UPPER YELLOWSTONE	86 to 99	60 to 72
LOWER YELLOWSTONE	70 to 83	47 to 60

NOTE: The *APRIL-JULY LAST YEAR % OF AVERAGE* column above, is what was forecast last year, **not** what actually occurred.

Surface Water Supply Index

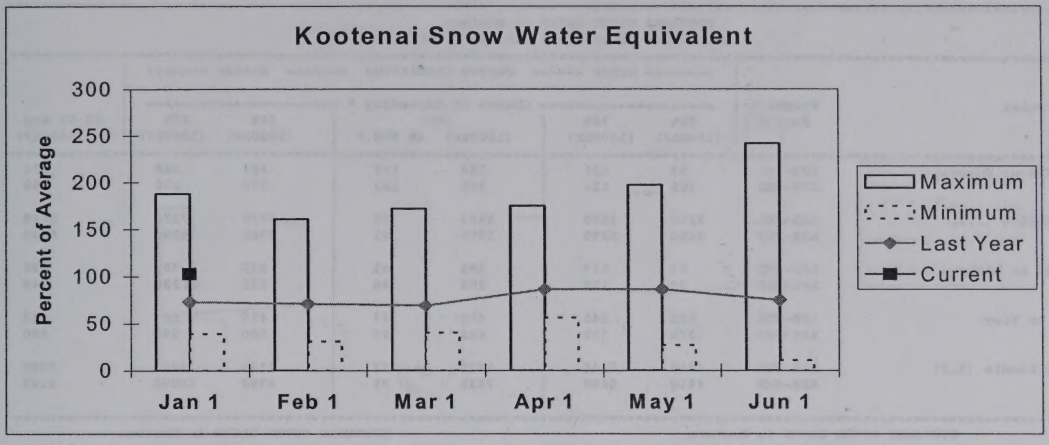
The Surface Water Supply Index (SWSI) is a measure of available surface water availability for the spring and summer months. Water users that rely on mountain precipitation can use the index to evaluate seasonal surface water supplies. The SWSI accounts for mountain snowpack, mountain precipitation, streamflow, reservoir storage, and soil moisture.

SWSI RATING	SURFACE WATER CONDITION
+3.0 to +4.0	Extremely Wet
+2.0 to +3.0	Moderately Wet
+1.0 to +2.0	Slightly Wet
-1.0 to +1.0	Near Average
-1.0 to -2.0	Slightly Dry
-2.0 to -3.0	Moderately Dry
-3.0 to -4.0	Extremely Dry

SWSI	Basin
+0.6	Tobacco River
0.0	Kootenai Ft. Steele to Libby Dam
+1.2	Kootenai River below Libby Dam
-0.8	Fisher River
+0.5	Yaak River
0.0	North Fork Flathead River
-1.6	Middle FORK Flathead River
0.0	South Fork Flathead River
-0.3	Flathead River at Columbia Falls
+0.2	Stillwater/Whitefish Rivers
-1.2	Swan River
-1.2	Flathead River at Polson
-1.0	Mission Valley
+0.9	Little Bitterroot River
-0.4	Clark Fork River above Milltown
-0.3	Blackfoot River
+0.9	Bitterroot River
0.0	Clark Fork River below Bitterroot River
-0.8	Clark Fork River below Flathead River
-2.7	Beaverhead River
-2.2	Ruby River
-0.5	Big Hole River
-1.0	Boulder River (Jefferson)
-1.6	Jefferson River
+0.2	Madison River
-1.3	Gallatin River
-0.6	Missouri River above Canyon Ferry
-0.8	Missouri River below Canyon Ferry
-0.2	Smith River
-1.3	Sun River
-1.0	Teton River
-1.7	Birch/Dupuyer Creeks
-2.0	Marias River above Tiber
-0.3	Marias River below Tiber
-0.7	Musselshell River
-1.0	Missouri River above Ft. Peck
-3.9	Missouri River below Ft. Peck
-2.9	Milk River
-1.4	Dearborn River near Craig
+0.1	Yellowstone River above Livingston
-0.6	Shields River
-1.6	Boulder River (Yellowstone)
-0.2	Stillwater River
-1.4	Rock/Red Lodge Creeks
-1.7	Clarks Fork River
-0.4	Yellowstone River above Bighorn River
-2.4	Bighorn River below Bighorn Lake
-1.1	Little Bighorn River
-1.3	Yellowstone River below Bighorn River
-0.9	Tongue River
-0.5	Powder River

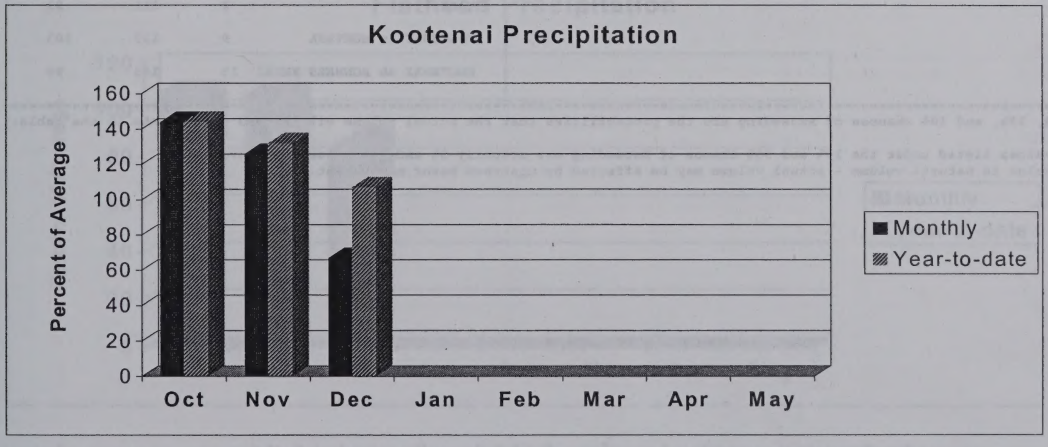
Kootenai River Basin in Montana

Snowpack conditions in the Kootenai River Basin were near average. Snow water content was 103 percent of average and 139 percent of last year.



January maximum swe was established in 1997 and minimum was in 1977; February maximum swe was in 1997 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1974 and minimum swe was in 1977; May maximum swe was in 1974 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during December was 67 percent of average and 73 percent of last year. Valley precipitation during December was 67 percent of average and 75 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 107 percent of average and 156 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 93 percent to 106 percent.

Lake Koocanusa storage was 122 percent of average and 101 percent of last year.

Surface Water Supply Index (SWSI) was +0.6 in the Tobacco River; 0.0 in the Kootenai Ft. Steele to Libby Dam; +1.2 in the Kootenai River below Libby Dam; -0.8 in the Fisher River; and +0.5 in the Yaak River.

KOOTENAI RIVER BASIN in Montana
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
TOBACCO RIVER nr Eureka	APR-JUL	92	121	140	103	159	188	136
	APR-SEP	103	134	155	103	176	205	150
LIBBY RES Inflow (1,2)	APR-JUL	3150	4530	5160	92	5790	7170	5640
	APR-SEP	3850	5380	6070	91	6760	8290	6640
FISHER RIVER nr Libby	APR-JUL	83	148	192	84	235	300	230
	APR-SEP	92	159	205	84	250	320	245
YAAK RIVER nr Troy	APR-JUL	255	345	410	93	475	565	440
	APR-SEP	275	370	435	95	500	595	460
KOOTENAI at Leonia (1,2)	APR-JUL	4640	5940	6530	93	7120	8420	7040
	APR-SEP	4810	6680	7530	93	8380	10250	8120

KOOTENAI RIVER BASIN in Montana
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LAKE KOOCANUSA	5748.0	3774.0	3753.0	3090.1

KOOTENAI RIVER BASIN in Montana
Watershed Snowpack Analysis - January 1, 2004

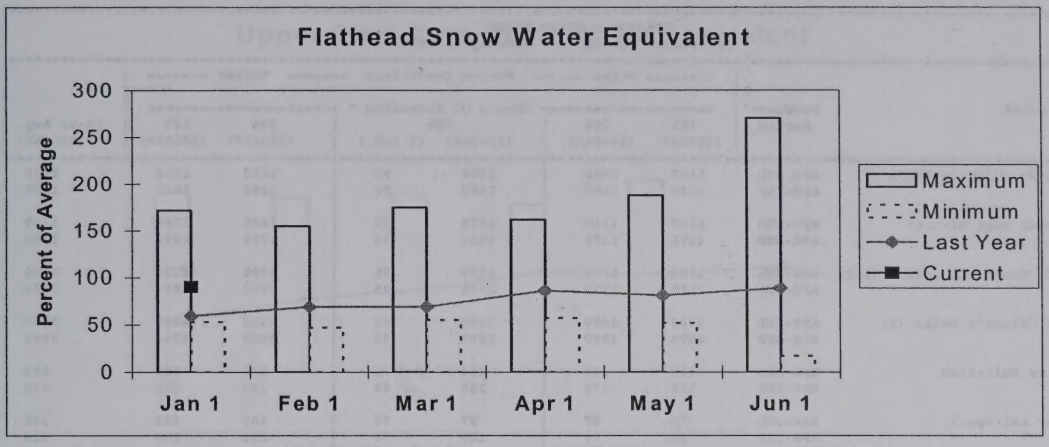
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
KOOTENAY in CANADA	6	159	91
KOOTENAI MAINTSTEM	3	147	115
TOBACCO	3	139	95
FISHER	1	162	93
YAAK	2	111	93
KOOTENAI in MONTANA	9	139	103
KOOTENAI ab BONNERS FERRY	15	145	99

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

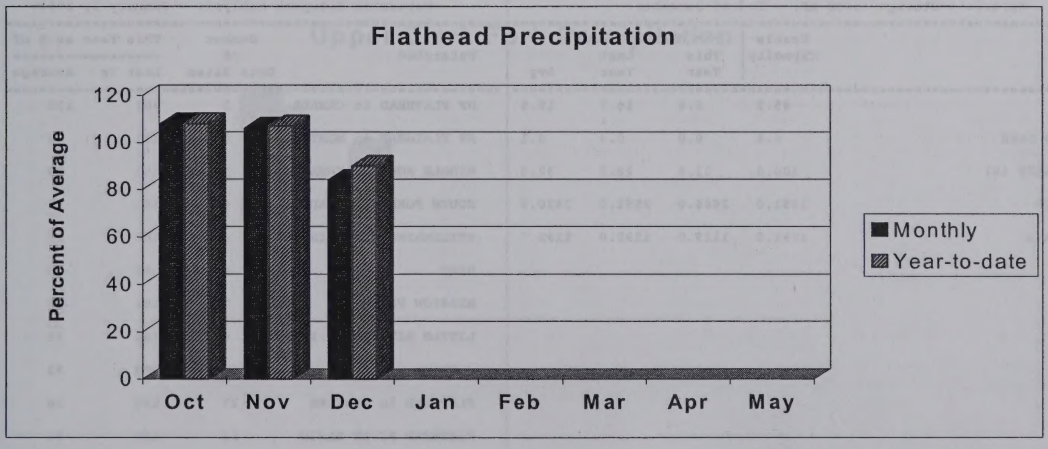
Flathead River Basin

Snowpack conditions in the Flathead River Basin were below average. Snow water content was 90 percent of average and 156 percent of last year.



January maximum swe was established in 1997 and minimum was in 2001; February maximum swe was in 1997 and minimum was in 2001; March maximum swe was in 1972 and minimum was in 2001; April maximum swe was in 1972 and minimum was in 2001; May maximum swe was in 1972 and minimum was in 1992; and June maximum swe was in 1974 and minimum was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during December was 65 percent of average and 93 percent of last year. Valley precipitation during December was 84 percent of average and 97 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 90 percent of average and 154 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 92 percent to 102 percent.

Combined Camas reservoir storage was 33 percent of average and 44 percent of last year; combined Mission Valley reservoir storage was 72 percent of average and 83 percent of last year; Hungry Horse storage was at 110 percent of average and 105 percent of last year; and Flathead Lake storage was 94 percent of average and 94 percent of last year.

Surface Water Supply Index (SWSI) was 0.0 in the North Fork Flathead River; -1.6 in the Middle Fork Flathead River; 0.0 in the South Fork Flathead River; -0.3 in the Flathead River at Columbia Falls; +0.2 in the Stillwater/Whitefish Rivers; -1.2 in the Swan River; -1.2 in the Flathead River at Polson; -1.0 in the Mission Valley; and +0.9 in the Little Bitterroot River.

FLATHEAD RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<======= Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
NF FLATHEAD nr Columbia Falls	APR-JUL	1150	1350	1480	91	1610	1810	1620
	APR-SEP	1290	1500	1650	92	1800	2010	1800
MF FLATHEAD nr West Glacier	APR-JUL	1150	1340	1470	93	1600	1790	1590
	APR-SEP	1270	1470	1610	93	1750	1950	1740
HUNGRY HORSE Reservoir Inflow (1,2)	APR-JUL	1260	1690	1890	95	2090	2520	2000
	APR-SEP	1190	1750	2010	95	2270	2830	2120
FLATHEAD at Columbia Falls (2)	APR-JUL	3700	4450	4950	92	5450	6200	5355
	APR-SEP	4070	4860	5390	93	5920	6710	5830
STILLWATER nr Whitefish	APR-JUL	119	158	184	96	210	250	192
	APR-SEP	134	176	205	98	235	275	210
WHITEFISH nr Kalispell	APR-JUL	72	87	97	96	107	122	101
	APR-SEP	80	97	109	96	121	138	114
ASHLEY CREEK nr Marion (2)	APR-JUL	3.05	4.69	5.80	81	6.90	8.60	7.20
	MARCH			0.85	80			1.06
SWAN RIVER nr Bigfork	APR-JUL	365	450	505	89	560	645	565
	APR-SEP	425	515	575	89	635	725	645
Flathead Lake inflow (1,2)	APR-JUL	4220	5340	5850	95	6360	7480	6180
	APR-SEP	3660	5500	6340	95	7180	9020	6700

FLATHEAD RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CAMAS (4)	45.2	6.4	14.7	19.5
LOWER JOCKO LAKE	6.4	0.0	0.0	0.1
MISSION VALLEY (8)	100.0	23.4	28.2	32.6
HUNGRY HORSE	3451.0	2666.0	2551.0	2420.9
FLATHEAD LAKE	1791.0	1119.0	1192.0	1192.7

FLATHEAD RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

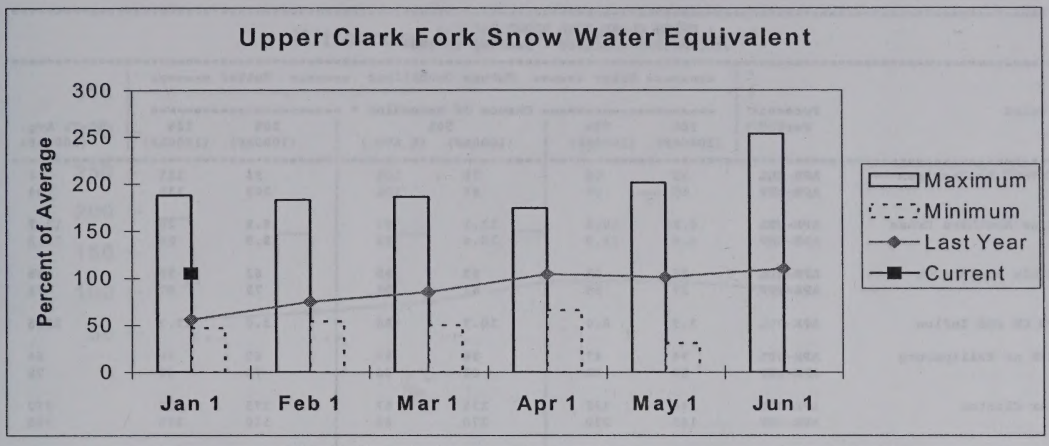
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
NF FLATHEAD in CANADA	1	363	105
NF FLATHEAD in MONTANA	6	131	88
MIDDLE FORK FLATHEAD	5	151	90
SOUTH FORK FLATHEAD	6	161	92
STILLWATER-WHITEFISH	4	168	85
SWAN	6	145	85
MISSION VALLEY	3	151	86
LITTLE BITTERROOT-ASHLEY	4	194	95
JOCKO	4	172	93
FLATHEAD in MONTANA	27	156	90
FLATHEAD RIVER BASIN	28	158	90

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

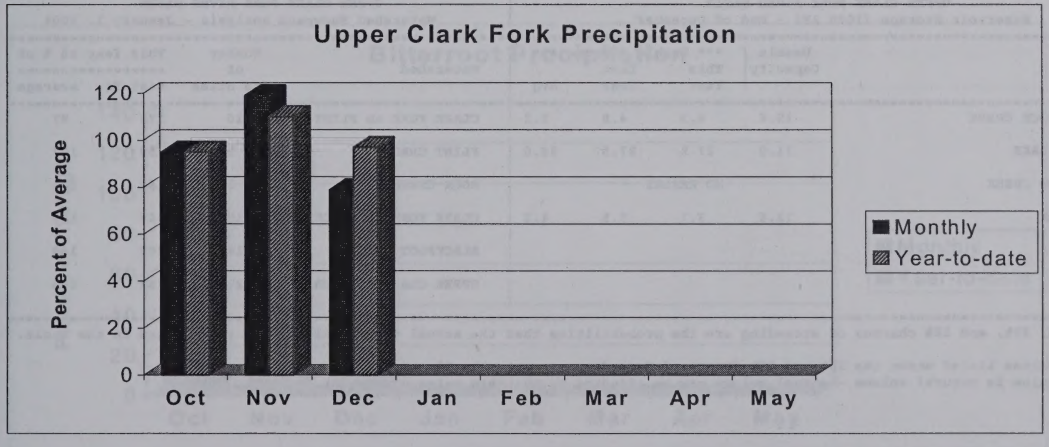
Upper Clark Fork River Basin

Snowpack conditions in the Upper Clark Fork River Basin were near average. Snow water content was 105 percent of average and 187 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum was in 1994; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1975 and minimum swe was in 1987. Average is for the period 1971 through 2000.

Mountain precipitation during December was 79 percent of average and 143 percent of last year. Valley precipitation during December was 84 percent of average and 178 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 97 percent of average and 181 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 93 percent to 110 percent.

East Fork Rock Creek storage was 60 percent of average and 102 percent of last year; Georgetown Lake was 99 percent of average and 101 percent of last year; Lower Willow Creek storage was not available; and Nevada Creek storage was 88 percent of average and 67 percent of last year.

Surface Water Supply Index (SWSI) was -0.4 in the Clark Fork River above Milltown; and -0.3 in the Blackfoot River.

UPPER CLARK FORK RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LITTLE BLACKFOOT nr Garrison	APR-JUL	35	60	78	103	96	121	76
	APR-SEP	40	67	85	101	103	130	84
FLINT CREEK nr Southern Cross	APR-JUL	6.2	10.3	13.1	96	15.9	20	13.7
	APR-SEP	6.8	11.9	15.4	95	18.9	24	16.2
FLINT CREEK blw Boulder Ck	APR-JUL	28	43	53	95	63	78	56
	APR-SEP	37	55	67	94	79	97	71
LOWER WILLOW CK RES Inflow	APR-JUL	3.9	8.0	10.7	86	13.4	17.3	12.5
MF ROCK CREEK nr Philipsburg	APR-JUL	34	47	56	88	65	78	64
	APR-SEP	39	53	63	88	73	87	72
ROCK CREEK nr Clinton	APR-JUL	140	195	235	87	275	330	270
	APR-SEP	165	230	270	89	310	375	305
CLARK FORK abv Milltown	APR-JUL	310	475	590	98	705	870	605
	APR-SEP	375	560	685	97	810	990	705
NEVADA CREEK nr Helmville	APR-JUL	5.2	9.8	13.0	75	16.2	21	17.3
BLACKFOOT RIVER nr Bonner	APR-JUL	455	610	715	89	820	975	805
	APR-SEP	520	685	795	89	905	1070	890
CLARK FORK abv Missoula	APR-JUL	780	1100	1310	93	1520	1840	1410
	APR-SEP	905	1250	1480	93	1710	2060	1600

UPPER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
EAST FORK ROCK CREEK	15.6	4.9	4.8	8.2
GEORGETOWN LAKE	31.0	27.8	27.5	28.0
LOWER WILLOW CREEK		NO REPORT		
NEVADA CREEK	12.6	3.7	5.5	4.2

UPPER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

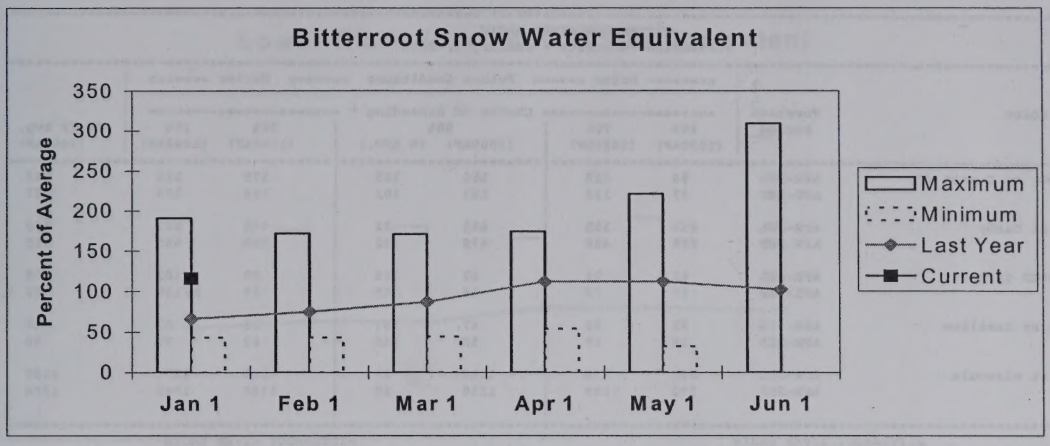
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
CLARK FORK ab FLINT CREEK	10	172	97
FLINT CREEK	5	159	107
ROCK CREEK	3	162	102
CLARK FORK ab BLACKFOOT	15	167	100
BLACKFOOT	14	208	109
UPPER CLARK FORK BASIN	27	187	105

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

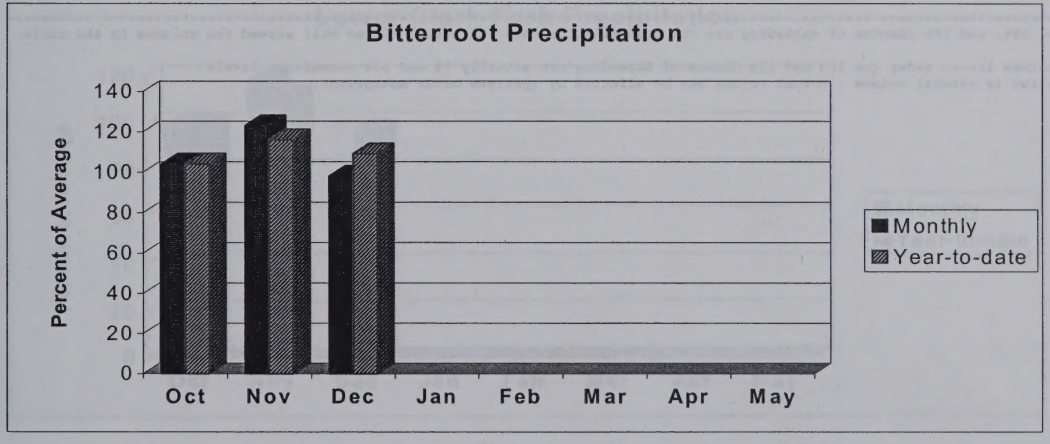
Bitterroot River Basin

Snowpack conditions in the Bitterroot River Basin were above average. Snow water content was 116 percent of average and 168 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum was in 1977; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 2001; May maximum swe was in 1972 and minimum swe was in 1987; and June maximum swe was 1972 and 1974 and minimum swe was in 1987, 1992, 1994, and 2001. Average is for the period 1971 through 2000.

Mountain precipitation during December was 97 percent of average and 151 percent of last year. Valley precipitation during December was 106 percent of average and 170 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 109 percent of average and 190 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 100 percent to 114 percent.

Painted Rocks Lake storage was 88 percent of average and 103 percent of last year and Como storage was 63 percent of average and 204 percent of last year.

Surface Water Supply Index (SWSI) was +0.9 in the Bitterroot River.

BITTERROOT RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WF BITTERROOT nr Conner (2)	APR-JUL	88	125	150	105	175	210	143
	APR-SEP	97	136	162	103	188	225	157
BITTERROOT nr Darby	APR-JUL	250	355	425	92	495	600	460
	APR-SEP	295	400	475	92	550	655	515
COMO RESERVOIR Inflow	APR-JUL	63	74	82	105	90	101	78
	APR-SEP	67	78	86	105	94	105	82
SKALKAHO CK nr Hamilton	APR-JUL	31	41	47	107	53	63	44
	APR-SEP	38	48	55	110	62	72	50
BITTERROOT at Missoula	APR-JUL	675	930	1110	89	1290	1550	1250
	APR-SEP	780	1040	1210	88	1380	1640	1370

BITTERROOT RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
PAINTED ROCKS LAKE	31.7	6.6	6.4	7.5
COMO	34.9	5.7	2.8	9.0

BITTERROOT RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

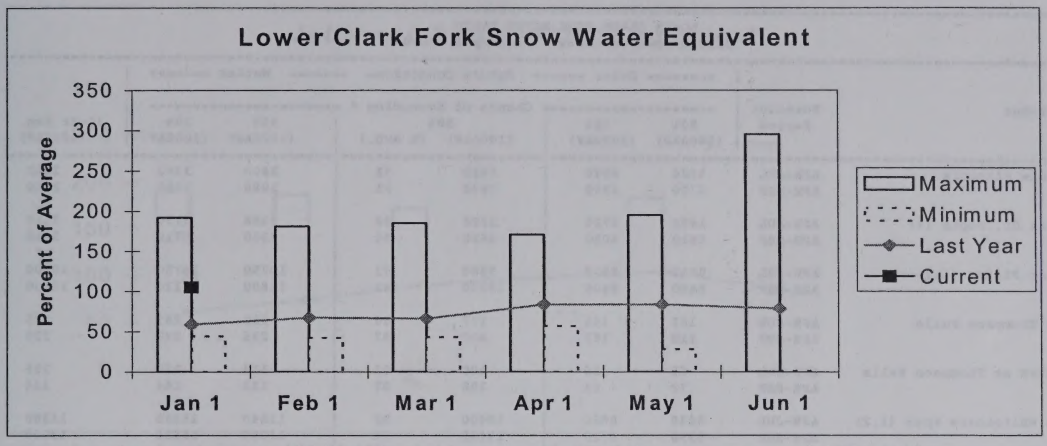
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WEST FORK BITTERROOT	2	158	106
EAST SIDE BITTERROOT	3	159	103
WEST SIDE BITTERROOT	3	177	124
BITTERROOT RIVER BASIN	7	168	116

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

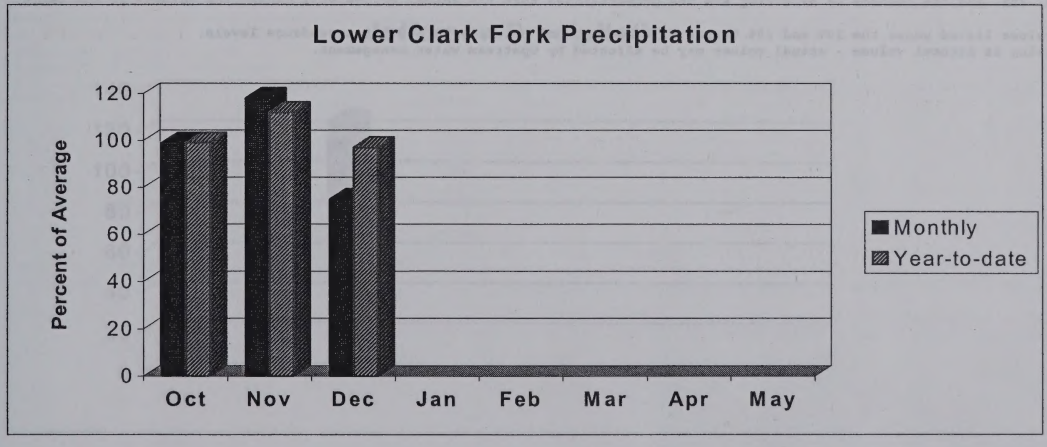
Lower Clark Fork River Basin

Snowpack conditions in the Lower Clark Fork River Basin were near average. Snow water content was 105 percent of average and 182 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1972 and minimum swe was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1972 and minimum swe was in 1981; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum swe was in 1974 and minimum swe was in 1977. Average is for the period 1971 through 2000.

Mountain precipitation during December was 78 percent of average and 102 percent of last year. Valley precipitation during December was 64 percent of average and 74 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 97 percent of average and 164 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 90 percent to 105 percent.

Noxon Rapids storage was 98 percent of average and 96 percent of last year.

Surface Water Supply Index (SWSI) was 0.0 in the Clark Fork River below Bitterroot River and -0.8 in the Clark Fork River below Flathead River.

LOWER CLARK FORK RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
CLARK FORK blw Missoula	APR-JUL	1480	2040	2420	91	2800	3360	2660
	APR-SEP	1720	2300	2690	91	3080	3660	2960
CLARK FORK at St. Regis (1)	APR-JUL	1450	2720	3300	94	3880	5150	3520
	APR-SEP	1610	3020	3660	94	4300	5710	3910
CLARK FORK nr Plains (1,2)	APR-JUL	5010	8010	9380	93	10750	13750	10100
	APR-SEP	5490	8800	10300	93	11800	15110	11100
THOMPSON nr Thompson Falls	APR-JUL	101	146	177	86	210	255	205
	APR-SEP	119	167	200	87	235	280	230
PROSPECT CREEK at Thompson Falls	APR-JUL	65	86	100	86	114	135	116
	APR-SEP	72	93	108	87	123	144	124
CLARK FK at Whitehorse Rpds (1,2)	APR-JUL	5470	8860	10400	92	11940	15330	11300
	APR-SEP	5970	9710	11400	91	13090	16830	12500

LOWER CLARK FORK RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
NOXON RAPIDS	335.0	310.8	323.4	315.8

LOWER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

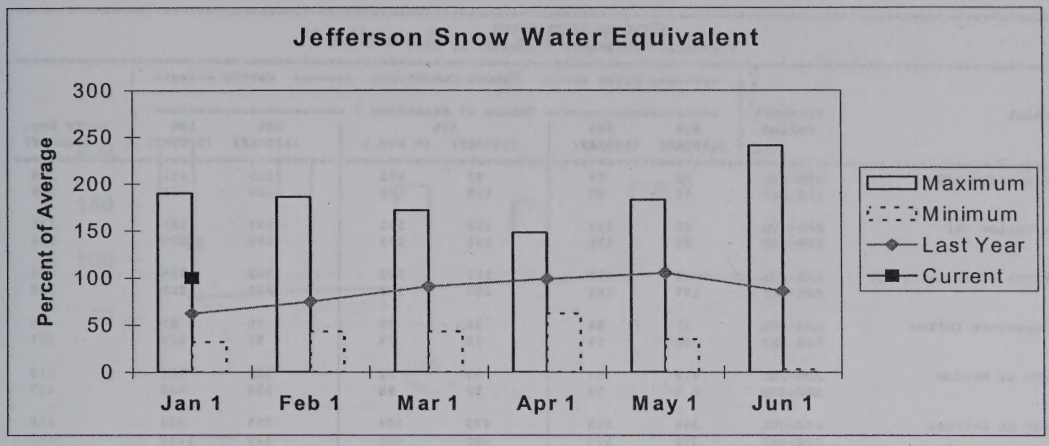
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LOWER CLARK FORK BASIN	8	182	106

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

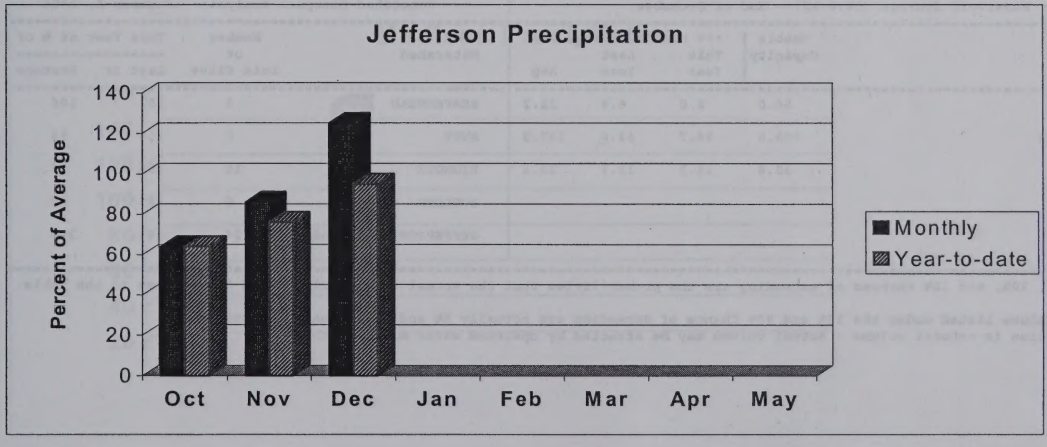
Jefferson River Basin

Snowpack conditions in the Jefferson River Basin were average. Snow water content was 100 percent of average and 161 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1972 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1977; May maximum swe was in 1975 and minimum swe was in 1977; and June maximum swe was in 1982 and minimum in 1987. Average is for the period 1971 through 2000.

Mountain precipitation during December was 121 percent of average and 190 percent of last year. Valley precipitation during December was 189 percent of average and 333 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 95 percent of average and 106 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 77 percent to 98 percent.

Lima storage was 19 percent of average and 122 percent of last year; Clark Canyon storage was 25 percent of average and 83 percent of last year; and Ruby River storage was 75 percent of average and 82 percent of last year.

Surface Water Supply Index (SWSI) was -2.7 in the Beaverhead River; -2.2 in the Ruby River; -0.5 in the Big Hole River; -1.0 in the Boulder River; and -1.6 in the Jefferson River as a whole.

JEFFERSON RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LIMA RESERVOIR Inflow (2)	APR-JUL	53	79	97	101	115	141	96
	APR-SEP	56	85	105	101	125	154	104
CLARK CANYON Inflow (2)	APR-JUL	83	112	132	101	152	181	131
	APR-SEP	99	135	160	103	185	220	156
BEAVERHEAD RIVER at Barretts (2)	APR-JUL	89	139	172	102	205	255	168
	APR-SEP	107	165	205	103	245	305	200
RUBY RIVER Reservoir Inflow	APR-JUL	37	54	66	79	78	95	84
	APR-SEP	46	66	79	78	92	112	101
BIG HOLE RIVER at Wisdom	APR-JUL	9.0	57	90	82	130	188	110
	APR-SEP	6.0	52	99	85	155	235	117
BIG HOLE RIVER nr Melrose	APR-JUL	340	515	635	104	755	930	610
	APR-SEP	375	560	690	105	820	1010	660
BOULDER RIVER nr Boulder	APR-JUL	32	60	79	101	98	126	78
	APR-SEP	34	64	85	100	106	136	85
WILLOW CREEK Reservoir Inflow	APR-JUL	6.1	13.9	19.1	107	24	32	17.9
	APR-SEP	6.2	15.0	21	105	27	36	20
JEFFERSON RIVER nr Three Forks (2)	APR-JUL	435	670	830	106	990	1230	780
	APR-SEP	475	730	900	105	1070	1320	860

JEFFERSON RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LIMA	84.0	6.0	4.9	32.2
CLARK CANYON	255.6	34.7	42.0	137.5
RUBY RIVER	38.8	15.3	18.7	20.4

JEFFERSON RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

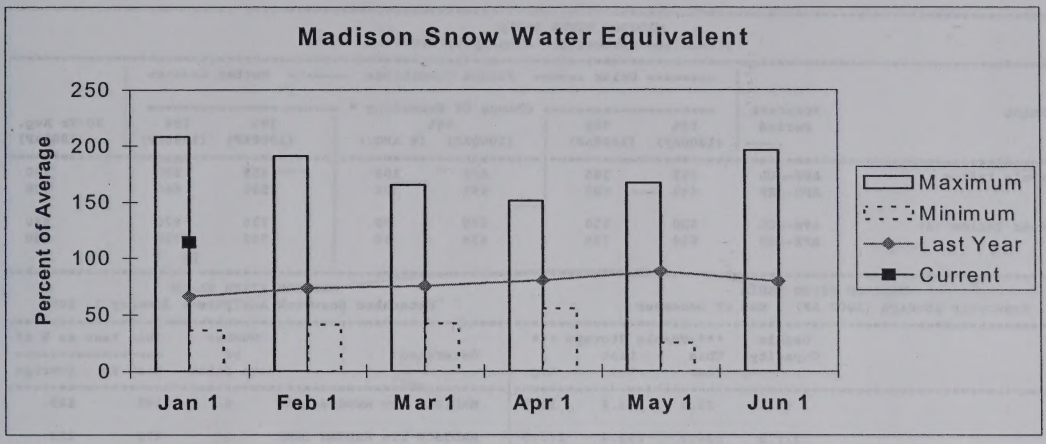
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BEAVERHEAD	8	157	106
RUBY	5	158	94
BIGHOLE	10	156	96
BOULDER	6	181	99
JEFFERSON RIVER BASIN	24	161	100

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

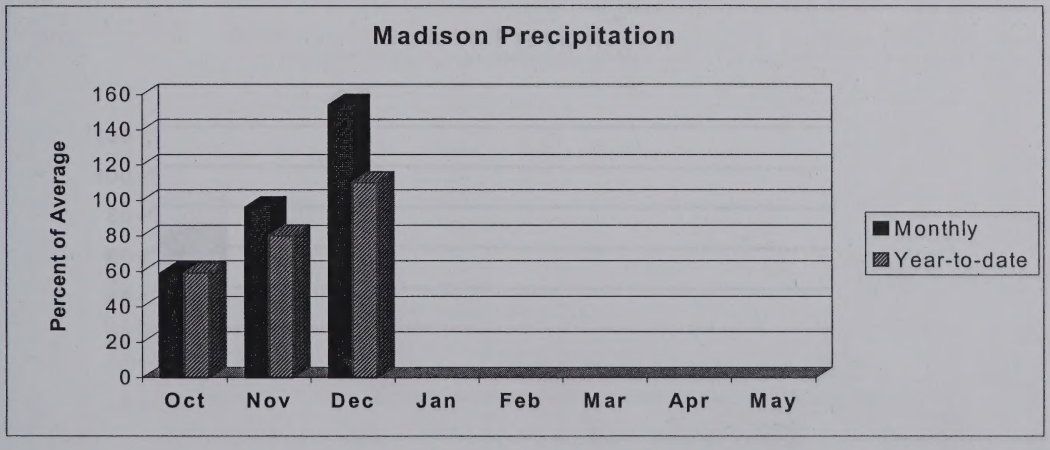
Madison River Basin

Snowpack conditions in the Madison River Basin were above average. Snow water content was 114 percent of average and 178 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1977; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1997 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1977; May maximum swe was in 1997 and minimum swe was in 1977; and June maximum swe was in 1995 and minimum in 1987 and 2001. Average is for the period 1971 through 2000.

Mountain and valley precipitation during December was 154 percent of average and 216 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 110 percent of average and 176 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 95 percent to 104 percent.

Ennis Lake storage was 93 percent of average and 101 percent of last year and Hebgen Lake storage was 107 percent of average and 96 percent of last year.

Surface Water Supply Index (SWSI) was +0.2 for the Madison River.

MADISON RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
HEBGEN Reservoir Inflow	APR-JUL	335	385	420	108	455	505	390
	APR-SEP	440	500	540	108	580	640	500
ENNIS Reservoir Inflow (2)	APR-JUL	520	610	670	99	730	820	680
	APR-SEP	650	755	830	98	905	1010	850

MADISON RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ENNIS LAKE	41.0	29.2	28.9	31.5
HEBGEN LAKE	377.5	286.2	299.4	267.6

MADISON RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

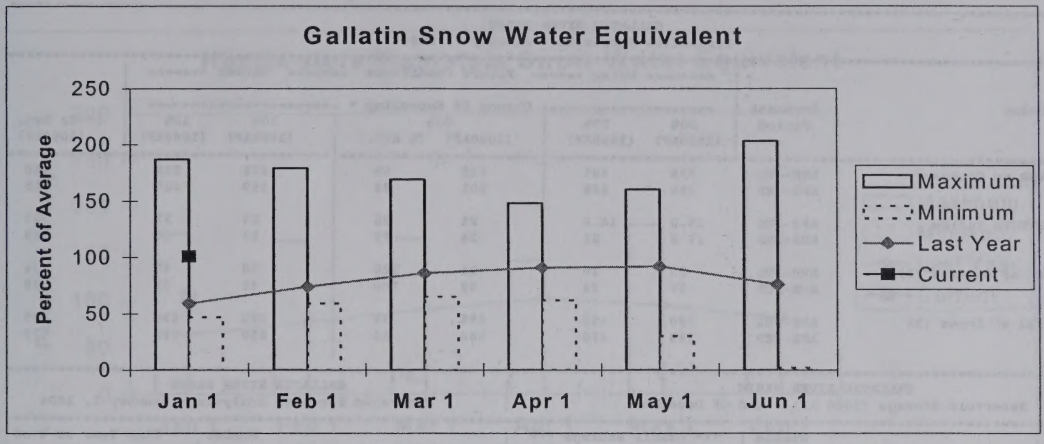
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
MADISON abv HEBGEN LAKE	6	183	129
MADISON blw HEBGEN LAKE	8	173	103
MADISON RIVER BASIN	14	178	114

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

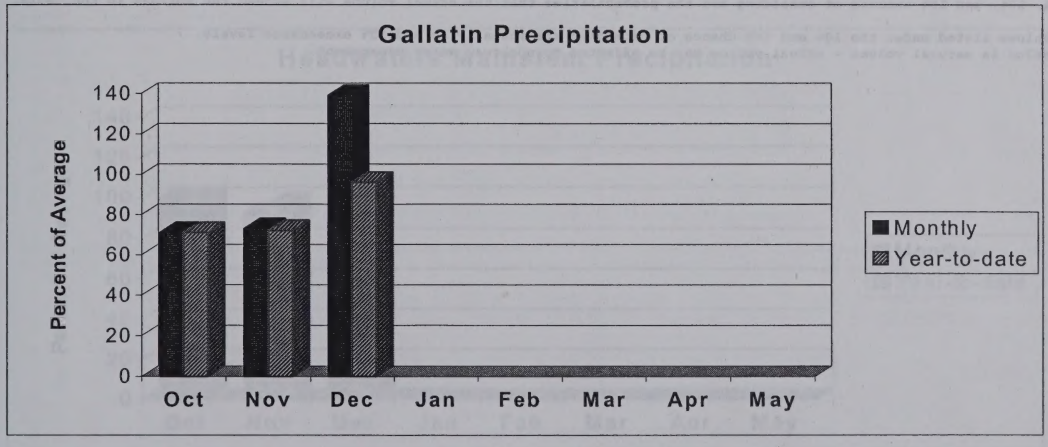
Gallatin River Basin

Snowpack conditions in the Gallatin River Basin were near average. Snow water content was 101 percent of average and 170 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1966; February maximum swe was in 1997 and minimum was in 1977; March maximum swe was in 1997 and minimum was in 1977; April maximum swe was in 1997 and minimum was in 1987; May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1975 and minimum in 2001. Average is for the period 1971 through 2000.

Mountain precipitation during December was 139 percent of average and 298 percent of last year. Valley precipitation during December was 137 percent of average and 623 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 96 percent of average and 191 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 86 percent to 98 percent.

Middle Creek storage was 134 percent of average and 102 percent of last year.

Surface Water Supply Index (SWSI) was -1.3 for the Gallatin River.

GALLATIN RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<=== Drier ===== Future Conditions ===== Wetter ===>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GALLATIN RIVER nr Gateway	APR-JUL	335	395	435	99	475	535	440
	APR-SEP	390	460	505	98	550	620	515
HYALITE RESERVOIR Inflow	APR-JUL	15.0	18.6	21	96	23	27	22
	APR-SEP	17.6	21	24	96	27	30	25
HYALITE CREEK nr Bozeman (2)	APR-JUL	23	30	34	100	38	45	34
	APR-SEP	27	34	39	100	44	51	39
GALLATIN RIVER at Logan (2)	APR-JUL	280	405	485	98	565	690	495
	APR-SEP	335	470	560	98	650	785	570

GALLATIN RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MIDDLE CREEK	10.2	5.5	5.4	4.1

GALLATIN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

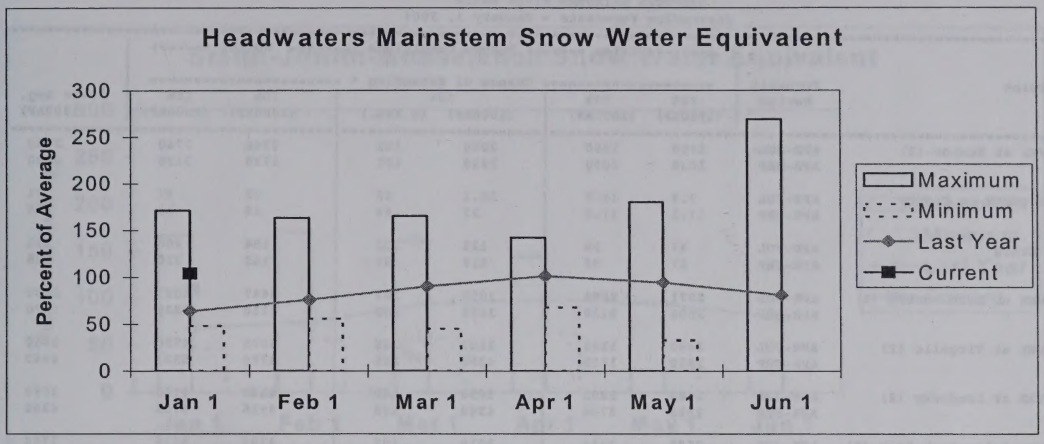
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER GALLATIN	4	191	107
HYALITE	2	161	88
BRIDGER	2	135	99
GALLATIN RIVER BASIN	8	170	101

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

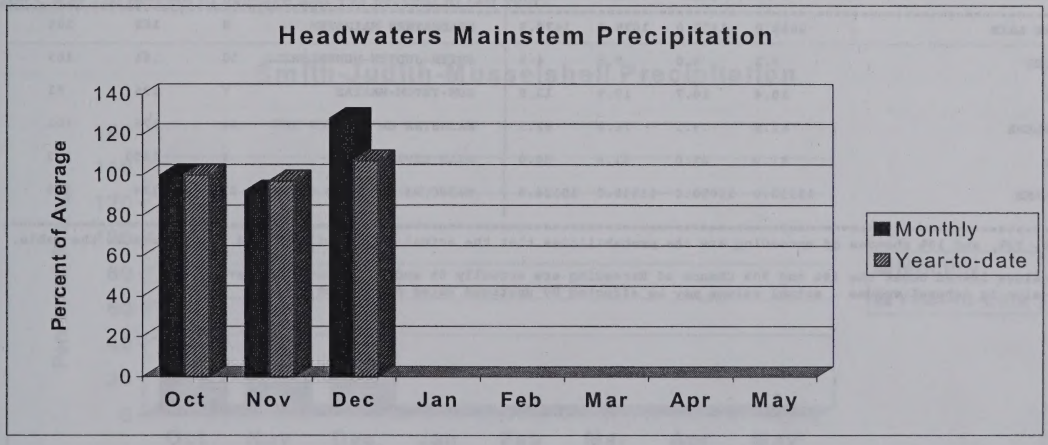
Missouri Mainstem River Basin

Snowpack conditions for the Missouri Mainstem are above average. Snow water content is 106 percent of average and 192 percent of last year. Snowpack in the Headwaters Missouri Mainstem River Basin were near average. Snow water content was 104 percent of average and 162 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1977; February maximum swe was in 1972 and minimum swe was in 1977 and 1988; March maximum swe in 1972 and minimum swe was in 1977; April maximum swe was in 1972 and minimum swe was in 1961 and 1966; May maximum swe was in 1975 and minimum swe was in 1977; and June maximum swe was in 1975 and minimum swe was in 1992. Average is for the period 1971 through 2000.

Mountain precipitation during December was 106 percent of average and 187 percent of last year. Valley precipitation during December was 160 percent of average and 309 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 107 percent of average and 169 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 74 to 87 percent.

Canyon Ferry Lake storage was 88 percent of average and 90 percent of last year; Helena Valley storage was 104 percent of average and 91 percent of last year; Lake Helena storage was 86 percent of average and 98 percent of last year; Hauser & Helena storage was 116 percent of average and 99 percent of last year; Holter Lake storage was 101 percent of average and 99 percent of last year; and Fort Peck Lake storage was 66 percent of average and 89 percent of last year.

Surface Water Supply Index (SWSI) was -0.6 in the Missouri River above Canyon Ferry; -0.8 in the Missouri River below Canyon Ferry; -1.4 in the Dearborn River near Craig; -1.0 in the Missouri River above Fort Peck; and -3.9 in the Missouri River below Fort Peck.

MISSOURI MAINSTEM RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<======= Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
MISSOURI RIVER at Toston (2)	APR-JUL	1400	1800	2070	101	2340	2740	2050
	APR-SEP	1630	2090	2410	101	2730	3190	2390
PRICKLY PEAR CREEK nr Clancy	APR-JUL	9.2	14.5	18.1	86	22	27	21
	APR-SEP	11.2	17.6	22	88	26	33	25
DEARBORN nr Craig	APR-JUL	43	90	122	101	154	200	121
	APR-SEP	47	96	129	103	162	210	125
MISSOURI RIVER at Fort Benton (2)	APR-JUL	2071	2654	3050	102	3447	4027	2990
	APR-SEP	2500	3110	3660	103	4110	4820	3570
MISSOURI RIVER at Virgelle (2)	APR-JUL	2490	3163	3620	105	4075	4750	3450
	APR-SEP	2920	3712	4250	105	4786	5581	4060
MISSOURI RIVER nr Landusky (2)	APR-JUL	2482	3201	3690	100	4180	4900	3690
	APR-SEP	2915	3764	4340	100	4916	5761	4350
MISSOURI RIVER below Fort Peck (2)	APR-JUL	2585	3314	3810	102	4306	5036	3740
	APR-SEP	2992	3836	4410	102	4986	5831	4330
LAKE SAKAKAWEA Inflow (2)	APR-JUL	6550	8449	9740	100	11034	12934	9740
	APR-SEP	7632	9816	11300	101	12781	14971	11200

MISSOURI MAINSTEM RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CANYON FERRY LAKE	2043.0	1471.0	1635.0	1670.3
HELENA VALLEY	9.2	5.0	5.5	4.8
LAKE HELENA	10.4	10.7	10.9	12.5
HAUSER & HELENA	61.9	73.1	74.0	62.9
HOLTER LAKE	81.9	81.0	81.8	80.0
FORT PECK LAKE	18910.0	10050.0	11340.0	15126.0

MISSOURI MAINSTEM RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

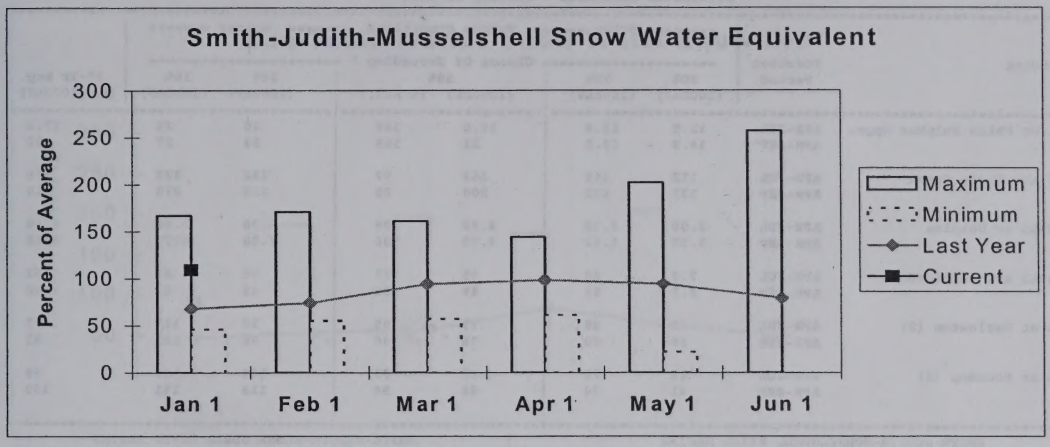
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
HEADWATERS MAINSTEM	8	162	104
SMITH-JUDITH-MUSSELSHELL	10	161	109
SUN-TETON-MARIAS	7	196	91
MAINSTEM ab FT PECK RES	24	176	101
MILK RIVER BASIN	4	3450	175
MISSOURI MAINSTEM BASIN	27	194	106

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

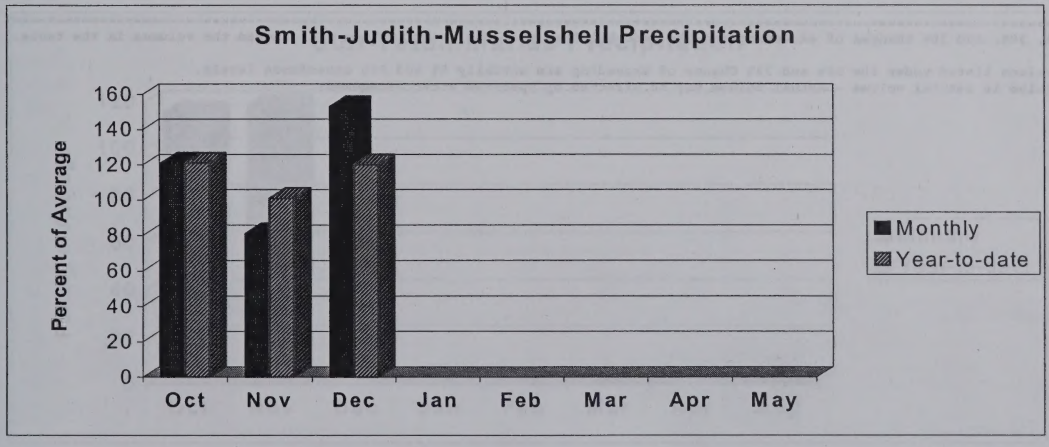
Smith-Judith-Musselshell River Basins

Snowpack conditions in the Smith-Judith-Musselshell River Basins were above average. Snow water content in the Smith River Basin was 102 percent of average and 142 percent of last year; in the Judith River Basin was 111 percent of average and 177 percent of last year; and in the Musselshell River Basin was 111 percent of average and 219 percent of last year.



January maximum swe was established in 1997 and minimum swe in 1988; February maximum swe was in 1978 and minimum swe was in 1987; March maximum swe was in 1978 and minimum swe was in 1987; April maximum swe was in 1970 and minimum swe was in 1992; and May maximum swe was in 1970 and minimum swe was in 1987; and June maximum swe was in 1967 and minimum swe was in 1987, 1992, 1994, and 2001. Average is for the period 1971 through 2000.

Mountain and valley precipitation during December in the Smith-Belts was 120 percent of average and 233 percent of last year; in the Judith was 186 percent of average and 409 percent of last year; and in the Musselshell was 196 percent of average and 446 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 120 percent of average and 194 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 78 to 97 percent.

Smith River storage was 74 percent of average and 105 percent of last year; Bair storage was 31 percent of average and 79 percent of last year; Martinsdale storage was 27 percent of average and 300 percent of last year; and Deadman's Basin was 29 percent of average and 95 percent of last year.

Surface Water Supply Index (SWSI) was -0.2 in the Smith River and -0.7 in the Musselshell River.

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SHEEP CREEK nr White Sulphur Spgs.	APR-JUL	12.5	15.8	18.0	105	20	23	17.1
	APR-SEP	14.9	18.5	21	105	23	27	20
SMITH RIVER abv Eagle Creek	APR-JUL	112	146	169	97	192	225	175
	APR-SEP	131	172	200	95	230	270	210
NF MUSSELSHELL nr Delpine	APR-JUL	2.00	3.70	4.80	104	5.90	7.60	4.60
	APR-SEP	2.50	4.40	5.70	106	7.00	8.90	5.40
SF MUSSELSHELL abv Martinsdale	APR-JUL	7.9	30	45	87	60	82	52
	APR-SEP	9.7	33	49	88	65	88	56
MUSSELSHELL at Harlowton (2)	APR-JUL	31	56	73	95	90	115	77
	APR-SEP	35	60	78	96	96	121	81
MUSSELSHELL nr Roundup (2)	APR-JUL	38	70	92	93	114	146	99
	APR-SEP	41	74	96	94	118	151	102

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
SMITH RIVER	10.6	4.2	4.0	5.7
BAIR	7.0	1.1	1.4	3.5
MARTINSDALE	23.1	2.7	0.9	10.1
DEADMAN'S BASIN	72.2	12.6	13.3	44.0

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Watershed Snowpack Analysis - January 1, 2004

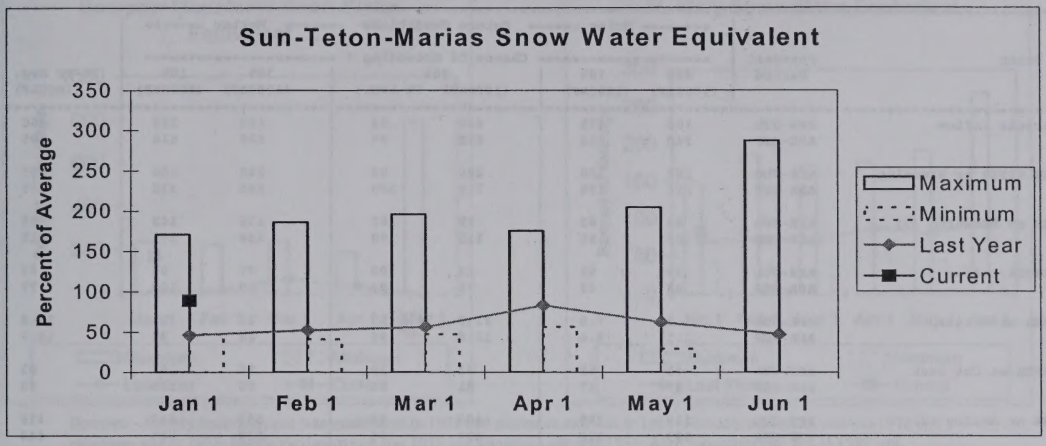
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SMITH	6	142	102
JUDITH	4	177	111
MUSSELSHELL	3	219	111
SMITH-JUDITH-MUSSELSHELL	10	161	109

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

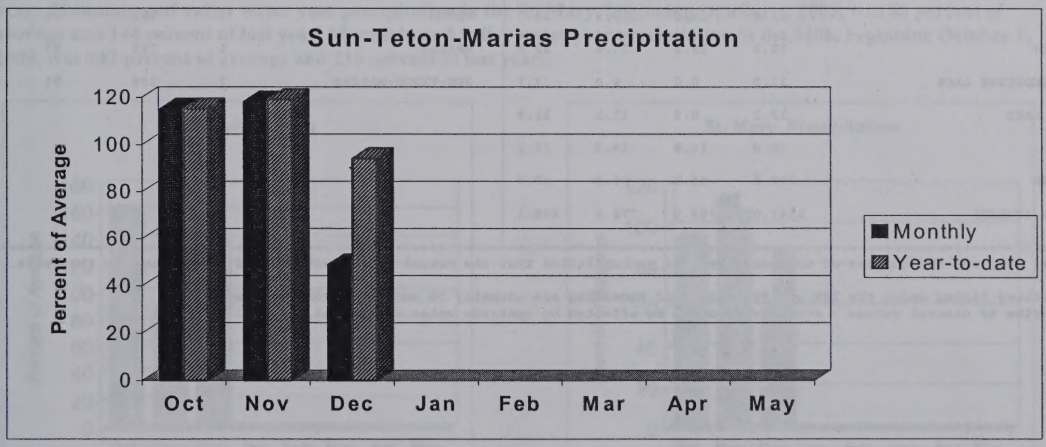
Sun-Teton-Marias River Basins

The combined snowpack conditions for the Sun-Teton-Marias River Basins were below average. Snow water content was 89 percent of average and 193 percent of last year. Snow water content in the Sun River Basin was 97 percent of average and 193 percent of last year; in the Teton River Basin was 90 percent of average and 195 percent of last year; and in the Marias River Basin was 85 percent of average and 191 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 2001; March maximum swe was in 1972 and minimum swe was in 1984; April maximum swe was in 1972 and minimum swe was in 1984; May maximum swe was in 1972 and minimum swe was in 1977; and June maximum was in 1972 and minimum swe was in 1987, 1992, and 1998. Average is for the period 1971 through 2000.

Mountain and valley precipitation during December in the Sun was 55 percent of average and 89 percent of last year; in the Teton was 53 percent of average and 83 percent of last year; and in the Marias was 46 percent of average and 77 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 94 percent of average and 173 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 71 to 93 percent.

Gibson storage was 40 percent of average and 44 percent of last year; Pishkun storage was 109 percent of average and 101 percent of last year; Willow Creek storage was 88 percent of average and 71 percent of last year; Lower Two Medicine Lake storage was 0 percent of average and 0 percent of last year; Four Horns Lake storage was 2 percent of average and 2 percent of last year; Swift storage was 104 percent of average and 100 percent of last year; Lake Frances storage was 69 percent of average and 51 percent of last year; and Lake Elwell (Tiber) storage was 119 percent of average and 99 percent of last year.

Surface Water Supply Index (SWSI) was -1.3 in the Sun River; -1.0 in the Teton River; -1.7 in the Birch/Dupuyer Creeks; -2.0 in the Marias River above Tiber, and -0.3 in the Marias below Tiber.

SUN-TETON-MARIAS RIVER BASINS
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GIBSON Reservoir Inflow	APR-JUL	300	375	430	94	485	560	460
	APR-SEP	340	420	475	94	530	610	505
TWO MEDICINE RIVER nr Browning	APR-JUL	102	160	200	98	240	300	205
	APR-SEP	116	175	215	100	255	315	215
BADGER CREEK nr Browning (2)	APR-JUL	56	82	99	100	116	142	99
	APR-SEP	69	96	115	100	134	161	115
SWIFT RESERVOIR Inflow	APR-JUL	33	51	64	100	77	95	64
	APR-SEP	43	63	76	99	89	109	77
DUPUYER CREEK nr Valier	APR-JUL	1.1	7.0	13.9	99	21	31	14.0
	APR-SEP	1.1	8.4	15.6	99	23	33	15.7
CUT BANK CREEK at Cut Bank	APR-JUL	41	60	73	90	86	105	81
	APR-SEP	47	67	81	90	95	115	90
MARIAS RIVER nr Shelby (2)	APR-JUL	138	295	400	96	505	660	415
	APR-SEP	153	310	420	96	530	685	440
TETON nr Dutton	APR-JUL	9.4	25	35	69	50	72	51
	APR-SEP	5.1	27	42	71	57	79	59

SUN-TETON-MARIAS RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GIBSON	99.1	17.2	39.5	42.5
PISHKUN	32.0	19.6	19.5	18.0
WILLOW CREEK	32.2	19.3	27.0	22.0
LOWER TWO MEDICINE LAKE	11.9	0.0	4.0	8.7
FOUR HORNS LAKE	19.2	0.2	11.1	11.8
SWIFT	30.0	14.8	14.8	14.2
LAKE FRANCES	112.0	46.3	90.0	67.0
LAKE ELWELL (TIBER)	1347.0	769.0	776.8	648.1

SUN-TETON-MARIAS RIVER BASINS
Watershed Snowpack Analysis - January 1, 2004

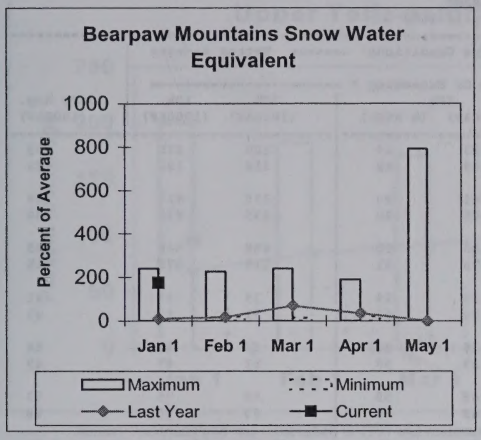
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SUN	2	193	97
TETON	3	195	90
MARIAS	4	195	87
SUN-TETON-MARIAS	7	196	91

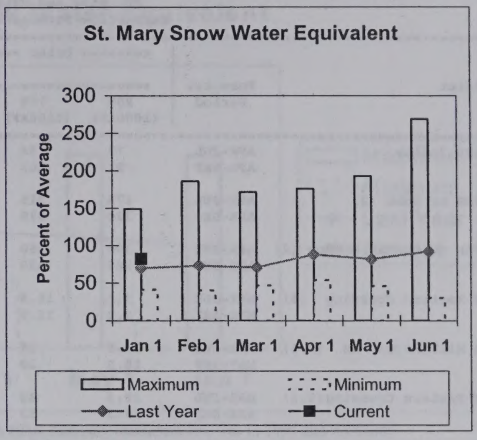
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

St. Mary and Milk River Basins

Snowpack conditions in the St. Mary and Milk River Basins were near average. Snow water content in the Saint Mary River Basin was 102 percent of average 182 percent of last year. The Milk River Basin (Bearpaw Mountains) was 175 percent of average and well above last year.

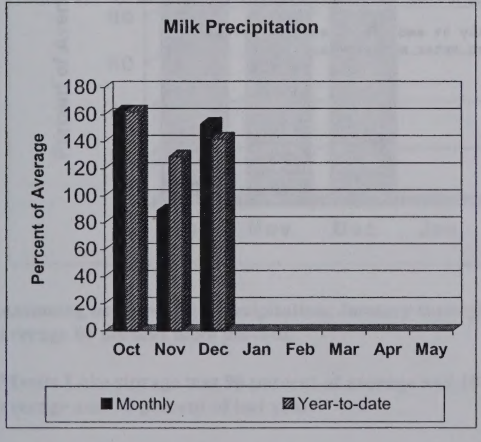


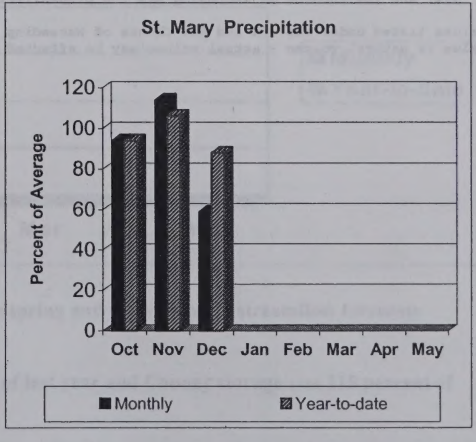


Bearpaw - January maximum swe was established in 1978 and minimum swe was in 1981; February maximum swe was 1978 and minimum was in 1973; March maximum swe was 1978 and minimum swe was 1995; April maximum swe was in 1985 and minimum swe was in 1973, 1983, and 1986; May maximum swe was 1975 and the minimum, 0.0, has occurred in several years. Average is for the period 1971 through 2000.

St. Mary - January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1972 and minimum swe was in 2001; March maximum swe was in 1972 and minimum swe was in 1977; April maximum swe was in 1967 and 1972 and minimum swe was in 2001; May maximum swe was in 19972 and minimum swe was in 1977; and June maximum swe was in 1972 and minimum swe was 1992. Average is for the period 1971 through 2000.

Mountain and valley precipitation in the St. Mary River Basin during December was 59 percent of average and 69 percent of last year; and in the Milk River Basin during December was 153 percent of average and 980 percent of last year. Mountain and valley water year precipitation in the St. Mary, beginning October 1, 2003, was 88 percent of average and 144 percent of last year. Mountain and valley water year precipitation in the Milk, beginning October 1, 2003, was 142 percent of average and 216 percent of last year.





Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts in the St. Mary average 82 to 90 percent. In the Milk the spring and early summer streamflow forecasts average 48 to 65 percent.

Lake Sherburne storage was 58 percent of average and 146 percent of last year; Fresno storage was 41 percent of average and 42 percent of last year; Beaver Creek storage was 81 percent of average and 63 percent of last year; and Nelson storage was 77 percent of average and 63 percent of last year.

Surface Water Supply Index (SWSI) was -2.9 for the Milk River.

ST. MARY and MILK RIVER BASINS
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
LAKE SHERBURNE Inflow	APR-JUL	75	86	93	89	100	111	105
	APR-SEP	91	102	109	89	116	127	122
ST. MARY RIVER nr Babb (2)	APR-JUL	275	315	345	90	375	415	385
	APR-SEP	330	375	405	90	435	480	450
ST. MARY RIVER at US/CAN Border (2)	APR-JUL	300	360	400	92	440	500	435
	APR-SEP	365	430	470	91	510	575	515
MILK RIVER @ Western Crossing (3)	MAR-JUL	9.4	14.8	22	54	29	39	41
	MAR-SEP	9.9	15.9	24	56	31	42	43
MILK RIVER @ Milk River, AB (2,3)	MAR-JUL	14.8	26	36	56	47	61	64
	MAR-SEP	15.2	28	39	56	51	67	69
MILK RIVER @ Eastern Crossing(2,3)	MAR-JUL	18.3	32	46	55	59	78	83
	MAR-SEP	19.3	33	49	56	65	86	88
BEAVER CREEK near Havre	MAR-JUL	3.01	6.52	8.90	93	11.31	14.81	9.60

ST. MARY and MILK RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
LAKE SHERBURNE	64.3	12.3	8.4	21.1
FRESNO	127.0	21.3	50.9	51.8
BEAVER CREEK	3.5	1.7	2.7	2.1
NELSON	66.8	27.6	43.5	35.7

ST. MARY and MILK RIVER BASINS
Watershed Snowpack Analysis - January 1, 2004

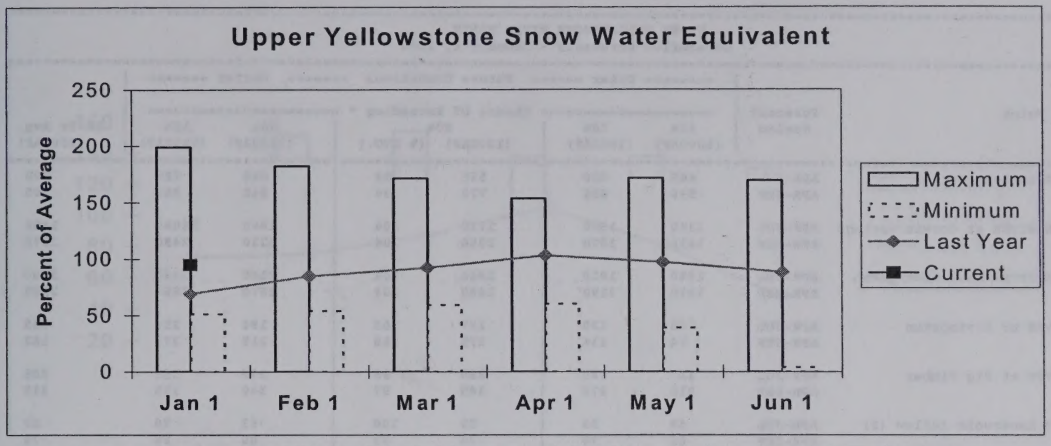
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
ST. MARY	2	116	82
BEARPAW MOUNTAINS	4	3450	175
CYPRESS HILLS, CANADA	0	0	0
MILK RIVER BASIN	4	3450	175
ST. MARY & MILK BASINS	6	182	102

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

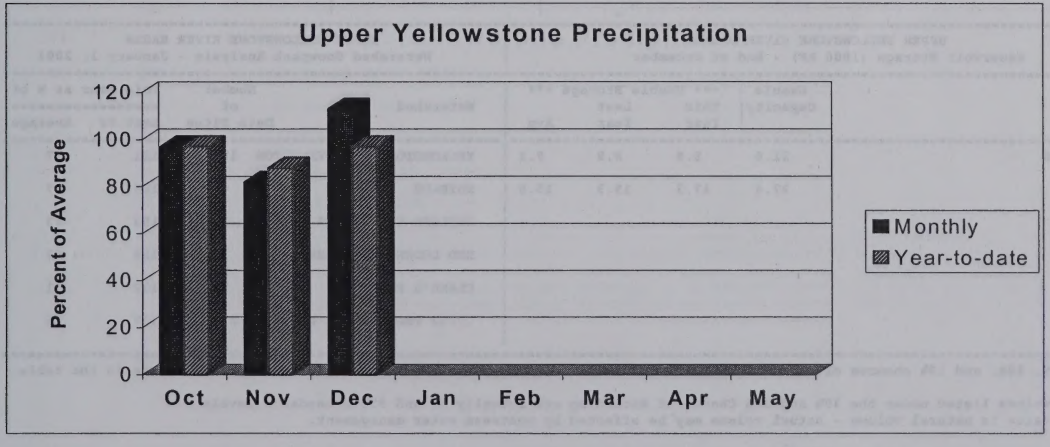
Upper Yellowstone River Basin

Snowpack conditions in the Upper Yellowstone River Basin were near average. Snow water content was 95 percent of average and 137 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 1988; February maximum swe was in 1997 and minimum swe was in 2001; March maximum swe was in 1997 and minimum swe was in 2001; April maximum swe was in 1997 and minimum swe was in 2001; May maximum swe was in 1997 and minimum swe was in 1987; and June maximum swe was 1996 and minimum swe was in 2001. Average is for the period 1971 through 2000.

Mountain precipitation during December was 112 percent of average and 188 percent of last year. Valley precipitation during December was 118 percent of average and 357 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 97 percent of average and 148 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 86 percent to 99 percent.

Mystic Lake storage was 96 percent of average and 101 percent of last year and Cooney storage was 115 percent of average and 90 percent of last year.

Surface Water Supply Index (SWSI) was +0.1 in the Yellowstone River above Livingston; -0.6 in the Shields River; -1.6 in the Boulder River; -0.2 in the Stillwater River; -1.4 in the Rock/Red lodge Creeks; -1.7 in the Clarks Fork River; and -0.4 in the Yellowstone River above Bighorn River.

UPPER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
YELLOWSTONE at Lake Outlet	APR-JUL	445	530	585	99	640	725	590
	APR-SEP	590	695	770	96	845	950	805
YELLOWSTONE RIVER at Corwin Springs	APR-JUL	1340	1560	1710	104	1860	2080	1650
	APR-SEP	1610	1870	2050	104	2230	2490	1970
YELLOWSTONE RIVER near Livingston	APR-JUL	1580	1820	1980	104	2140	2380	1900
	APR-SEP	1910	2190	2380	104	2570	2850	2280
SHIELDS RIVER nr Livingston	APR-JUL	66	120	157	108	194	250	145
	APR-SEP	74	134	175	108	215	275	162
BOULDER RIVER at Big Timber	APR-JUL	197	245	280	98	315	365	285
	APR-SEP	215	270	305	97	340	395	315
MYSTIC LAKE Reservoir Inflow (2)	APR-JUL	48	55	59	100	63	70	59
	APR-SEP	62	70	75	99	80	88	76
STILLWATER RIVER nr Absarokee (2)	APR-JUL	355	420	465	94	510	575	495
	APR-SEP	425	500	550	94	600	675	585
CLARKS FORK RIVER nr Belfry	APR-JUL	410	470	515	95	560	620	540
	APR-SEP	445	515	560	94	605	675	595
COONEY RESERVOIR Inflow (2)	APR-JUL	15.1	32	43	92	54	71	47
	APR-SEP	24	41	53	93	65	82	57
YELLOWSTONE RIVER at Billings (2)	APR-JUL	2260	2810	3180	91	3550	4100	3510
	APR-SEP	3330	3970	4410	107	4850	5490	4120

UPPER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MYSTIC LAKE	21.0	8.9	8.8	9.3
COONEY	27.4	17.3	19.3	15.0

UPPER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

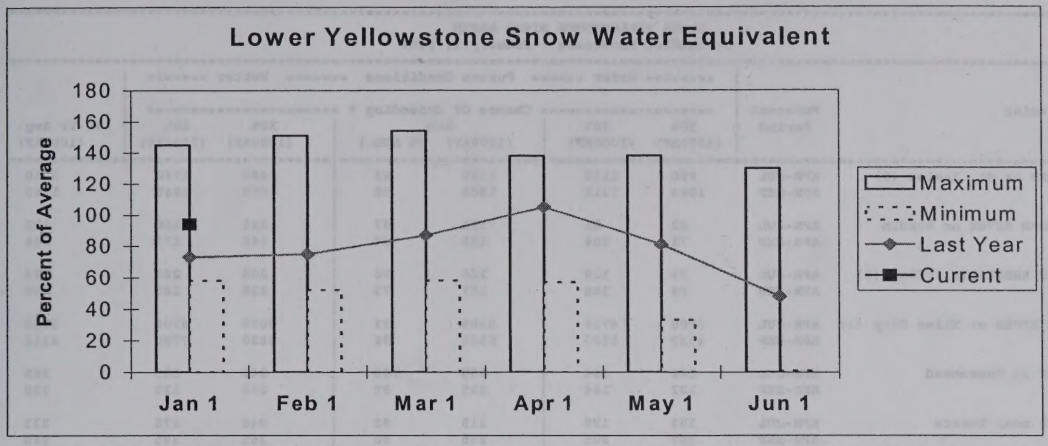
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
YELLOWSTONE ab LIVINGSTON	12	131	97
SHIELDS	4	166	97
BOULDER-STILLWATER	3	153	93
RED LODGE-ROCK CREEK	1	126	87
CLARK'S FORK	7	132	91
UPPER YELLOWSTONE BASIN	23	137	95

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

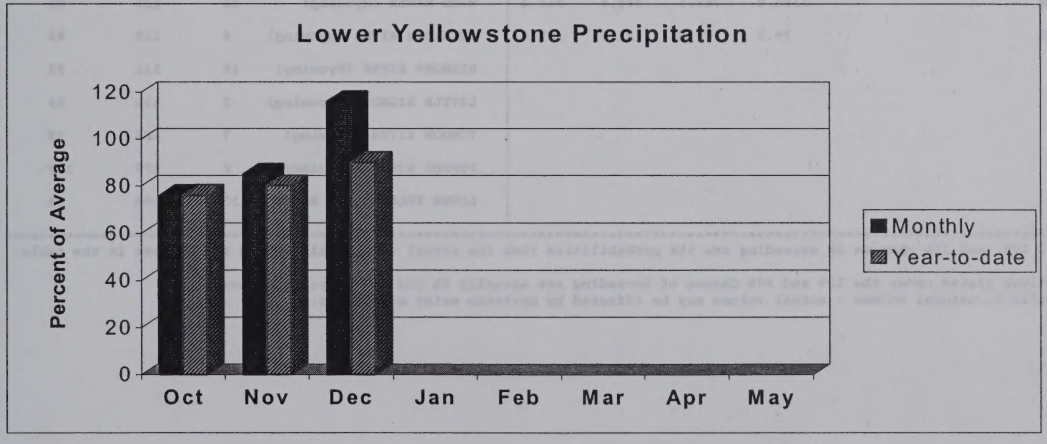
Lower Yellowstone River Basin

Snowpack conditions in the Lower Yellowstone River Basin were below average. Snow water content was 94 percent of average and 128 percent of last year.



January maximum swe was established in 1997 and minimum swe was in 2000; February maximum swe was in 1997 and minimum swe was in 2001; March maximum swe was in 1986 and minimum swe was in 2001; April maximum swe was in 1986 and minimum swe was in 2001; May maximum swe was in 1997 and minimum swe was in 1981; and June maximum swe was in 1995 and minimum swe was in 2001. Average is for the period 1971 through 2000.

Mountain precipitation during December was 113 percent of average and 234 percent of last year. Valley precipitation during December was 116 percent of average and 240 percent of last year. Mountain and valley water year precipitation, beginning October 1, 2003, was 90 percent of average and 134 percent of last year.



Assuming near average precipitation, January through July, the spring and early summer streamflow forecasts average 70 to 83 percent.

Bighorn Lake storage was 83 percent of average and 119 percent of last year and Tongue River storage was 204 percent of average and 145 percent of last year.

Surface Water Supply Index (SWSI) was -2.4 in the Bighorn River below Bighorn Lake; -1.1 in the Little Bighorn River; -1.3 in the Yellowstone River below Bighorn River; -0.9 in the Tongue River; and -0.5 in the Powder River.

LOWER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - January 1, 2004

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BIGHORN RIVER nr St. Xavier (2)	APR-JUL	900	1150	1320	82	1490	1740	1610
	APR-SEP	1040	1310	1500	85	1690	1960	1760
LITTLE BIGHORN RIVER nr Hardin	APR-JUL	62	91	111	87	131	160	128
	APR-SEP	72	104	125	87	146	178	144
TONGUE RIVER RESERVOIR Inflow (2)	APR-JUL	74	129	166	76	205	260	220
	APR-SEP	90	148	187	75	225	285	250
YELLOWSTONE RIVER at Miles City (2)	APR-JUL	3900	4730	5300	99	5870	6700	5360
	APR-SEP	4530	5500	6160	99	6820	7790	6210
POWDER RIVER at Moorehead	APR-JUL	104	164	205	100	245	305	205
	APR-SEP	122	184	225	98	265	330	230
POWDER RIVER near Locate	APR-JUL	153	190	215	92	240	275	235
	APR-SEP	167	205	235	90	265	305	260
YELLOWSTONE RIVER nr Sidney (2)	APR-JUL	4040	4900	5480	100	6060	6920	5480
	APR-SEP	4620	5600	6270	100	6940	7920	6280

LOWER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIGHORN LAKE	1356.0	757.6	635.6	911.1
TONGUE RIVER	79.1	45.8	31.5	22.5

LOWER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2004

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WIND RIVER (Wyoming)	12	122	89
SHOSHONE RIVER (Wyoming)	6	119	88
BIGHORN RIVER (Wyoming)	16	131	92
LITTLE BIGHORN (Wyoming)	2	124	89
TONGUE RIVER (Wyoming)	7	128	98
POWDER RIVER (Wyoming)	6	178	119
LOWER YELLOWSTONE BASIN (	31	128	94

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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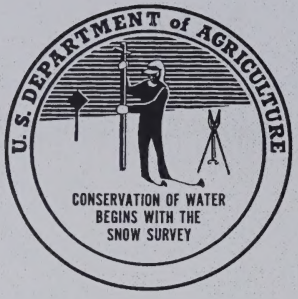

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Montana
Water Supply Outlook
Report

Natural Resources Conservation Service
Bozeman, MT